

CALAMITIES OF THE WORLD

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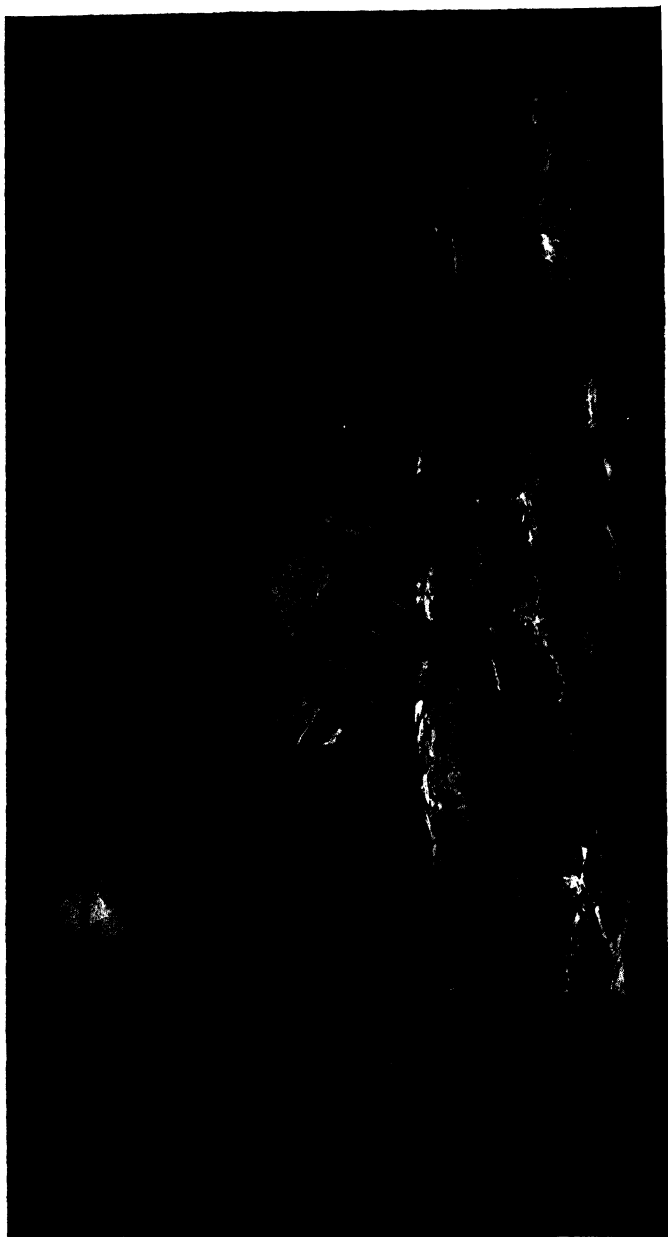
ROMANTIC JAVA, AS IT WAS
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A TROPICAL TAPESTRY

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GREAT DISASTERS OF THE
WORLD



H.M.S. "CAPTAIN"
"She was heeling over a good deal to starboard."

CALAMITIES OF THE WORLD

by

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With Illustrations by

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"Wherein I spake of most disastrous chances,
Of moving accidents by flood and field."
—*Othello*.

"Death
Grinned horrible a ghastly smile, to hear
His famine should be filled."
—*Paradise Lost*.

"Unbounded courage and compassion joined
. . . make the hero and the man complete."
—ADDISON'S *Cato*.

The nature of the episodes which compose this book may be said to find expression in the first and second of the foregoing quotations, but the lesson which they teach lies in the third.

ACKNOWLEDGMENTS

As in the case of *Great Disasters of the World*, the forerunner of this volume, I have to acknowledge my indebtedness to a large number of newspapers for material incorporated in these narratives. I have received indispensable assistance from the files of *The Times*, the *Daily Mail*, the *Daily Express*, the *Morning Post*, the *Daily Telegraph*, the *Daily Sketch*, the *Daily Mirror*, the *Daily News*, *News of the World*, the *Cardiff Times*, the *New York Times*, the *New York Herald*, the *Chicago Herald and Examiner*, the *South Wales News*, *The Scotsman*, the *Kingston Chronicle*, the *Times of India*, the *Eastern Morning News*, the *Hull News*, *Le Temps*, *Le Matin*, *Corriere d'Italia*, and *Mercurio* (Valparaiso). And again I have to thank a number of friends and acquaintances for personal recollections of disasters in which they had the ill fortune to be involved. Finally, let me say on behalf of Errol Tremayne, the illustrator of this book, that he found both *The Graphic* and the *Illustrated London News* exceedingly helpful in ensuring accuracy of detail in his pictures.

H. S. B.

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THE PARIS CHARITY BAZAAR AFFAIR

THE PARIS CHARITY BAZAAR AFFAIR

FOR some years prior to 1897 the Charity Bazaar had become an annual Parisian "event". Representing the combined efforts of nearly all the individual charitable institutions managed by Society women, it was chiefly carried on by members of Catholic and Conservative circles who, precluded from political activity, devoted their energies instead to the relief of the poor and afflicted, the organiser-in-chief being Mr. Henry Blount, Sir Edward Blount's son. The profits, invariably substantial, were divided out among the various participant charities, which also divided up the running expenses. The awful tragedy which overtook this venture on May 4th, 1897, horrified the world not merely by its appalling suddenness, nor merely because it wiped out of existence 200 people whose names were household words in Paris, but, most of all, because the victims were genuine philanthropists who, unlike so many self-styled benefactors of humanity, carried out their good works without seeking to attract thereby the limelight of publicity. They all belonged to the class most widely known, most hospitable, and upon which the city's commerce was most dependent. Yet none of those who met an agonising death that day had ever seen their names displayed in the newspapers as philanthropists. As was well said of them: "It is the most humble among the richest, the most charitable among the most select and fashionable, who have been thus burned in the flames like grass or stubble, and it is for this reason that the sorrow is so general and so profound, and finds an echo in the very heart of the French race."

The Bazaar's original quarters had been in the Rue de la Boétie, but this year it had moved to a site lent by Mme. Henri Heine in the Rue Jean Goujon, between the Rue François I^{er} and the quay in the direction of the Cours

la Reine, and just opposite Baron Alphonse de Rothschild's stables. A hall some 150 feet in length by 50 feet wide had been constructed of deal planks, well tarred by way of protection against rain. At one end was a "tambour"—that is to say, a space closed in front but having a door at each side. There were a number of doors reserved for the use of employees, opening on to a patch of waste ground at the back, and also two windows, but the general public appears to have been unaware of the existence of these, so that to all intents and purposes the two exits at the "tambour" may be said to have been the only means of egress available. The back of the building, however, was formed by a wall of the Hotel du Palais, a family establishment fronting upon the Cours la Reine and the river, and in this wall, some six feet from the ground, was a window, which, as matters turned out, played a highly important part in the grim drama to be enacted.

To embellish the hall the management had purchased a set of stage scenery, painted originally for the Theatre and Music Hall Exhibition at the Palais de l'Industrie, representing a street of seventeenth-century Parisian shops. This was arranged on either side, the shops, with their projecting gables and swinging signs, forming the various stalls. Along the centre at intervals were benches in character with the period of the "street", which, however, made it extremely difficult for a large throng of people to move about at all freely. At the opposite end from the doors was the refreshment buffet, taking up the whole width of the hall. Near the entrance there was placed a cinematograph projector, the lamp of which burned a mixture of oxygen and vapour of ether, compressed in a cylinder below the apparatus. Everywhere were inflammable hangings, and the ceiling of the hall was composed of some flimsy textile material. Mr. Michel Heine confessed afterwards—when it was too late!—"It is evident that our arrangements were ill made, and that we ought to have foreseen a possible disaster, but our stalls were increasing every year and we were anxious not to lose an inch of ground."

The Bazaar had been duly opened two days before amid the usual enthusiasm, and the scene on this Tuesday afternoon was far removed from any hint of impending tragedy.

It must be pictured as a long narrow gallery with picturesque little open shops on either hand, filled with merchandise of all descriptions presided over by vivacious Society saleswomen, whose assistants moved about among the eighteen-hundred-odd visitors pressing them to step inside and make purchases. Among the stall-holders were many foreigners, including both English and Americans, but the vast majority, as already stated, were women drawn from the Parisian aristocracy. The buffet was under the direction of Mme. de Flores, wife of the Spanish Consul; the Duchesse d'Uzès had a stall close to the cinematograph, and others were presided over by such notabilities as, for example, the Baronnes de St. Martin, de St. Didier, Récamier, and de Horn, the Duchesses de la Torre and de la Barre, Princess Kotchenberg, the Comtesses de Bonneval, de St. Périer, de Savigny, de Mimosiel and de Brodeville, and Vicomtesses Hunol Holstein and d'Avenel. Most distinguished stallholder of all was the Duchesse d'Alençon, youngest of the five daughters of Duke Max of Bavaria, her sisters being the Empress of Austria, the ex-Queen of Naples, the Hereditary Princess Helena of Thurn and Taxis, and the Countess Mathilde of Trani, while her brother was Duke Charles Theodore of Bavaria.

It has been mentioned above that the disaster came about with horrifying swiftness. Actually, it was all over within twelve minutes, and Captain Fox, of the London Salvage Corps, who went to inspect the scene afterwards, reported that the fire must have progressed with such extraordinary velocity that "even if there had been a large force of the fire brigade present in the street at the actual moment of the outbreak, with the hose already laid out, it would have been impossible to have saved any portion of the building".

Exactly how the thing happened nobody was quite able to say, but blame was officially laid upon the imperfections of the cinematograph machine. All that the operator, stated to be a highly competent man, could remember was that directly after the showing of a film of the mid-Lent procession the lamp apparently went out. He then asked permission for a pause of a few moments in which to relight it, but at that instant there came a noise like the explosion of a squib, and fire immediately broke out. It was

generally supposed that the ether lamp set the film alight, and that the flames then ignited either some of the hangings or a tarpaulin that was fixed above the apparatus. Be that as it may, almost instantaneously a curling flame was seen to be darting along the cotton ceiling, and at once the congested crowd stampeded.

What followed can only read more like a nightmare than an account of actual happenings. Within a matter of seconds the canvas and tarred woodwork had been transformed into walls of roaring flame. "Had the spacious shed been struck by lightning at its four corners," wrote one eyewitness, "it could hardly have vanished more quickly from the eyes of men." In the wild rush for safety, probably a thousand people somehow managed to fight their way out speedily, either by the regular exits or through discovering the other doors and windows reserved for the staff. But numbers of the maddened fugitives fell in jumping down the steps, while others behind stumbled over them, thus blocking the openings, and egress by the two doors at the "tambour" was hampered by the presence of a turnstile. Again, there were many who hesitated to flee on to the patch of waste ground behind the hall, for fear that even there they would be too close to the searing flames. According to Baron de Mackau, but for this last unreasonable fear there need have been no loss of life at all. But fear they did, and a drove of people bereft of their senses simply rushed in the opposite direction to that from which the fiery death seemed most closely to threaten them, crazily precipitating themselves against the blank wall at the far end, where they found themselves hemmed in, apparently beyond all hope of escape. Others, collected in the corners or pressed tight together near the entrances, remained a prey to the flames or to the rain of blazing molten tar. Some of the wretched women simply stood stock still imploring help, when a few steps would have brought them out of the building. One of these convulsively clutched Baron de Mackau's waistcoat, which split, and she then fell head-foremost into the flames. . . .

Yet to some of these insensate creatures even now came salvation. More than thirty were saved through being helped over a wall by means of a ladder by two priests from

an adjoining convent, Father Bailly and Father Ambroise. And then there was that window high up in the wall of the Hotel du Palais, the back-wall of the blazing hall. Through this window Mme. Rochesautier, the proprietress, and her staff, hastily removing the iron bars, hoisted a hundred and fifty of the fear-crazed men and women to safety. There were more than those hundred and fifty huddled there, but before more could be saved the roof had collapsed and the remainder were simply shrivelled up in the ensuing inferno.

Here is the story told by one of the women who found themselves caught in that frenzied jam : "The place was chock full, and as the heat was stifling I and my friends determined to leave, but somehow or other we could make no headway towards the door, and I lagged somewhat behind. I was being offered a nosegay by one of the stall-holders, when a sudden cry of 'Fire !' was raised. We tried to keep cool, but the rush from behind forced us forward, and we got separated. I saw it was useless to try to find each other. Nevertheless, I endeavoured to work my way back, and in so doing was carried right off my feet and swayed backwards and forwards. I lost my hat, and my coat was torn off my back, while all my other clothes were torn. All this happened within a few seconds.

"Then the full extent of the calamity began to dawn upon us all, for the flames had spread with startling rapidity through the whole building. The crashing and rumbling of the living furnace could not drown the groans that burst from the breasts of the agonised crowd. I gradually found myself pushed towards the back of the building, and at length succeeded in scrambling through an opening made in the wall by some of those near me. A second later and I should have been among the victims, for I had hardly struggled through the hole before I heard a dreadful crash as the blazing roof fell in. How many were inside I do not know. All I know is that the place was packed. I cannot possibly describe anything, for no words can depict my horror."

There were other tales of hairbreadth escapes besides the foregoing. Let the Duchesse d'Uzès tell her experience : "The first gleam of fire came from a short distance from where I was. I was dazzled, so swiftly did the flame spread. I

can compare it only to the bursting of a rocket. I could not think of reaching the street door, but near me was a small door leading to waste ground behind. I went to it and was thus soon in the open air, though still in the enclosure. I had passed, as it were, under an archway of flame, and it slightly burnt some hair on my left temple."

Perhaps the most vital story told by any survivor, however, is that of Mme. de Chenevière, the wife of a novelist, and one of the stall-holders: "I was at the refreshment-stall, when I suddenly heard a cry of 'Fire!' Some members of the committee who were present said, 'Gently, ladies; don't hurry. You've plenty of time.' In spite of this everybody, even before seeing the flames, rushed towards the doors, pushing and trampling on each other in their haste to get out first. I did like other people—I rushed to the door on the right leading to the Rue Jean Goujon. Turning round, I perceived the flames, which were invading the building like a hurricane of fire. I hurried as much as I could, struggling desperately. I think I was three minutes in reaching it. When I got there it was on fire, and the flames struck my right ear and my hair, which, by a providential chance which I cannot explain, did not catch fire. . . .

"To reach the door which for me was deliverance I must have trodden on corpses or on the dying at their last gasp, but in my alarm I perceived nothing, yielding, moreover, to the terrible pressure of people crowding behind me. Once at the opening of the door I thought myself saved, but at that moment I fell into the street. I had simply fallen from the top of the heaving mass of dying and injured stretched at the foot of the steps. I tried to rise, but in vain. I was a prisoner, hemmed in up to my waist by this human wave. At last by a supreme effort, and assisted by the occupants of the adjoining houses, I succeeded in extricating myself, and in a few minutes found myself in the court of 50, Rue Jean Goujon, occupied by a livery-stable-keeper, where there were already nearly fifty injured who were receiving every attention. Many persons who had, like me, miraculously escaped death wanted, in spite of their injuries, to go back into the fire where they had left a relation or a friend. We were prevented by being shut up in a court, where the injured were carefully attended to."

The Duchesse d'Alençon died like the great lady she was. "I was talking with her, when we heard the cry of 'Fire !'" narrates a young woman who was assisting the Duchesse at her stall. "I said, 'Let us hurry out,' but she replied, 'Not yet ; let us give the visitors time to get out.' Then, as the crowd rushed to the doors, and as the flames spread with marvellous speed, and as burning pitch fell on us from the roof, I grasped the Duchesse by the waist and repeated, dragging her along, 'Come, Madame ! You must really come !' but she shook me off, saying, 'No, no ! I stay.' Half-suffocated and already attacked by the flames, I was forced to leave the Duchesse, and she remained motionless scarcely two steps from her stall, her eyes raised to Heaven as if she beheld a vision." And Mlle. d'Andlau, who also tried to make the Duchesse escape, said that her very last words were, 'Go fast before us ; go out fast. Do not trouble about me ; I shall leave last.'

Scarcely less eerie was the experience narrated by a sister of mercy who was found walking backwards and forwards among the ruins afterwards in an extremity of distress, carrying in her arms the dress of a companion. "I was here when the fire broke out," she said in answer to questions. "It was by the stall of the Duchesse d'Uzès that it originated. The cinematograph was just at the side of the stall. I remember a well-dressed lady, whose veil was in flames, kissing me and saying, 'Come, sister, we will go to Heaven together,' and she clasped me fast with her arms. I disengaged myself as best I could, and managed to escape by one of the small exits. I did not notice that the lady in question had not followed me. I believe she remained behind and was burned. With me, near the door through which I got out, was another sister of mercy. Just as I lost sight of her she was crossing herself." Poor sisters of mercy ! There were many of them in that holocaust ; one eyewitness said she had seen a whole party of them huddled together near the refreshment-buffet, not one of whom was saved. . . .

It can be imagined with what horror the dwellers in the neighbouring houses gazed down at the terrible drama in progress before their eyes. It must have been a sight to freeze the blood. For through all the adjoining streets—

the Avenue Montaigne, the Place de l'Alma, the Rue François I^{er}—rushed a demented horde of men, women and children, but women for the most part, who had succeeded in struggling out of the blazing hall. Numbers of them had scarcely a rag left on them: there were men in shirts and trousers, women in torn petticoats, hatless, their hair hanging loose. Vehicles of every description were simply stormed by the fugitives. One young woman who had been acting as an attendant at the Bazaar, and who still carried her badge of office on her breast, was observed rushing wildly through the streets in her petticoat, for her dress had been torn off to fling over some woman who had been rescued in flames. The poor girl's one thought was to find her parents and let them know she was safe, but so utterly distraught was she that when at last she found them it was a long time before she could recognise them. "One man saw, as he stood there," we are told, "one of the numerous footmen who had rushed from the carriages to the entrance of the Bazaar suddenly dash forward as he recognised a poor woman stark naked, who came reeling out of the building, and lift her in his arms and carry her to her carriage."

A particularly vivid account of that dreadful exodus is given us by Gamard, one of Baron de Rothschild's grooms: "I have never seen a more appalling sight," says he. "In less than five minutes there was nothing left of the Charity Bazaar. It was about twenty minutes past four when I saw a woman, who I afterwards learned was the Comtesse de Resse, rush out of the Bazaar into the street shouting 'Fire, fire!' I looked to see where the fire was, and saw nothing but a little smoke, a sort of steam, which rose from the roof of the structure, near the centre. I could not think why the woman was in such a fright, when suddenly I heard a kind of roar, or rather a confused murmur. Then instantly the roof burst into flames, just like a box of matches to which you set fire. Instantly there was a rush of people like a wave into the street. Terror was depicted on every face. The hair of some was burning and the clothes of others were scorched. There was such a crush from the inside of the building that ten women fell together in a heap on the pavement. Those following naturally tumbled pell-mell over



PARIS CHARITY BAZAAR

"The only elevation . . . was a little heap of charred corpses."

their bodies, crushing and bruising them, and the poor women shrieked in agony. It was heartrending.

"I rushed out to try and lift some of them up, but I was completely driven back by the flood of frenzied people who, with death behind them, poured forth from the blazing building shrieking with agony. Many threw themselves to the ground and rolled from side to side in an attempt to stifle the flames which were consuming their faces.

"One lady, whose name I do not know, had reached the street in safety. Then, apparently noticing that someone, her child perhaps, was not with her, she had the sublime courage to turn and force her way back against the human torrent, biting and scratching like a mad creature to gain a path for herself, and re-entered the furnace, from which there can hardly be a doubt she never again emerged.

"Then came men with hair and beards in flames. Among them I saw General Munier with his clothes ablaze. In his agony he ran into the courtyard in front of the Baron de Rothschild's stables, and, seeing a trough full of water, jumped into it. Fetching a quantity of hose, we turned jets of water on to the burning people, and so saved several from being roasted alive."

General Munier's injuries, though apparently but slight, actually proved mortal. In his death there was a peculiar element of irony. A retired Divisional General and a Grand Officer of the Legion of Honour, he had been the hero of twenty battlefields and had seemed always as though he must bear a charmed life. During the Crimean War he had several times been mentioned for special valour. In a single battle he had once had three horses killed under him. At Solferino he alone had been left on his feet with three hundred soldiers fallen around him. At Sedan he had been almost the only officer of his battalion who came out alive. And now, that such a man should die in a Charity Bazaar ! . . .

With the same amazing velocity which had characterised the whole affair the fire burned itself out. Within half an hour of the hall catching alight the ground was simply an open space between the neighbouring houses, black and level, without a sign of its having ever contained any building whatever. No masonry was left standing, there were none of those heat-contorted iron girders and half-consumed

beams which normally characterise the débris of a big conflagration. Even charred wood was rare ; practically everything had been reduced to fine ash. "The only elevation which caught the eye along this sinister black space was a little heap of charred corpses near where had been the entrance of the building. Here were shreds of women's dresses, a few twenty-franc pieces, blackened shoes, and odds and ends of articles from the Bazaar which had resisted the fire. But of the numberless bodies which still remained in the ashes, now sodden by water poured in on them by the firemen, not one was recognisable."

A detachment of young soldiers of the 28th Regiment was called in to help the firemen in their melancholy work of hunting for the dead. With shovels or with bare hands they dug among the wet ashes, toiling feverishly to finish the task before sunset. As the pitiful remains were unearthed—in most cases simply a shapeless, blackened mass or an armful of scorched bones—they were bundled together in white sheets, accompanied by as much of the surrounding débris as might afford some clue to assist identification, and driven away in the ambulances which were now coming and going in an unbroken stream. The dead were removed first to the Palais de l'Industrie, where they were laid out in rows on hastily improvised plank tables ; soon, however, there was no more space available, and thereafter they were taken instead to the Beaujon Hospital. By 7 p.m. 100 corpses had been thus disposed to await identification, but it was believed that at least as many again still remained to be discovered.

Meanwhile the scenes in the Rue Jean Goujon were such as to defy description. One of the most tragic impressions was that conveyed by the smart carriages which still stood in the precincts where the coachmen had been ordered to await masters and mistresses who never would require their services again. On the pavement lay a long row of still, sheeted forms, from end to end of which moved constantly the doctors and a group of priests from a little Catholic chapel in the Place François I^{er} hard by. Whenever life was found still not extinct, the sufferers were removed to one or other of the neighbouring mansions which had been converted into hospitals ; if it proved already too late for

the services of doctor or priest, the remains were taken to one of the extemporised mortuaries.

The scene was thronged with a crowd of relatives and friends, all frantic for news of people they knew to have been at the Bazaar. Among the clamouring hundreds were many well-known figures in the Jockey Club and the Club de la Rue Royale, also a number of Deputies and Ministers. The Comte de Mun ; Admiral Besnard, Minister of Marine ; Mons. Hanotaux, Minister for Foreign Affairs ; and numberless other prominent public men were there anxiously soliciting information. But as yet there was no information to be had, save in the form of rumour, for up to now not a single body had been found identifiable. It was a picture of indescribable grief and despair. "One woman rushed about frantically asking for her daughter, and, someone having told her that she was safe, the inquirer jumped, danced and screamed, and, after rushing to her coachman and telling him to drive her home, fell down in a dead swoon. . . . Another woman went clean out of her mind on reaching the scene of the disaster. Yet another woman imagined she recognised her daughter's dress, and called hysterically to her husband to tell the police to prevent her from going to the bazaar."

At 1 o'clock in the morning Paris was still strangely animated. Carriages were coming and going in all directions, and the streets were filled with crowds of people who had trooped in from the outskirts and suburbs, some drawn merely by morbid curiosity, others to seek tidings of some relative who had failed to return home. At the scene of the tragedy the firemen were still at work levelling the soil, their labours lighted by torches in the hands of *sergents-de-ville*. A cordon of police held the crowd at a distance while workmen hastily erected a high palisade around the spot.

From 6 p.m. onwards persons directly interested had been permitted to enter the Palais de l'Industrie and the Beaujon Hospital and view the mortal remains. With bared head they passed slowly along the lines of motionless forms, steeling themselves against nausea. Now and then a woman would faint or have to be assisted out of the building. "The pain of recognition was spared them, but the perhaps more horrible pain of uncertainty was substituted, because in most

cases anything like identification was impossible." The guardianship of the dead and the shepherding of the distraught friends and relatives was anything but an agreeable duty, and for the self-sacrificing fashion in which it was performed a special tribute must be paid to the devotion of the sisters of charity from the Hôpital de Notre Dame du Perpétuel Secours.

Impossible as it might at first have appeared, the task of identification was at last completed. In many cases it could be performed only by a process of elimination, in others it was facilitated by the discovery of some familiar piece of jewellery or other article. The remains of the Duchesse d'Alençon were finally identified by her dentist, though among the ruins had been found her watch, her wedding-ring, and another ring inscribed "Ferdinand d'Orléans—Sophie de Bavière," which had been her betrothal-ring. The list of dead included so many names familiar from end to end of France that space will not permit of recapitulating them. A daughter of Baron de Mandat Grancey, one of England's best friends in France; General Munier; Baronne de St. Martin; Comtesse de St. Périer; Mlle. Henriette d'Hinnisdahl; Comtesse de Bonneval; Mme. Jacques Hoffmann; Baronne de St. Didier; Mons. Victor Podevin; Baronne de Mackau; Vicomtesse Hunol Holstein; Marquise de Florès; Mme. Moreau-Neluton, with her son and four daughters; Père Marbeau, Curé of St. Honoré d'Eylau; Comtesse de Mimoiel; Mr. Victor Gosselin; Mme. Schlumberger; Mme. Haussmann; Comtesse de Brodeville; Mme. Laneyrie, wife of the Vice-President of the Tribunal of the Seine—these were but a few among the victims, all well-known and, in many cases, illustrious. The injured lying in the hospitals included such names as General Février, ex-Chancellor of the Legion of Honour; Marquis de Lubersac; several members of the Macedo family; Baronne Récamier; Duchesse de la Torre; Mme. Dubreuil; Princess Kotchenberg; Mme. Eugène Challemeil; Mme. de Lensingen; Mme. Jullian; Vicomtesse d'Avenel; Mons. Ponsard; Mme. de Villemoisy; Mlle. Laporte; Mme. Lefort; Mons. Marais; Mme. Poittevin; Duchesse d'Uzès; Mme. Wilson; Mlle. de Labouleye; and Comtesse de Savigny.

To say that Europe was profoundly moved would be to understate the case. Every ambassador in Paris called on the Minister for Foreign Affairs to offer condolences from his Government, and telegrams poured in, not only from all the European sovereigns, but from the mayors of innumerable cities and towns. As for Paris, it could talk of nothing else but the disaster, and the whole city was plunged in mourning. The theatres were closed, most social engagements were either cancelled or postponed indefinitely. On June 7th there were so many funerals that "you seemed to meet a hearse at every corner. . . . A dark veil even subdued the wonted brilliancy of the Paris reporters ; the minds of the writers were so profoundly moved that they thought no longer of dazzling their readers by their cleverness. . . . On the streets the habitual din had decidedly diminished and people spoke in lower tones. It was as if the passers-by were conversing in a church or at the side of a grave. . . ."

A public Requiem Mass was held in Notre Dame, with the façade of the great edifice draped gloomily in black crape. It was attended by the Lord Mayor of London, accompanied by Mr. Alderman and Sheriff Ritchie, Mr. Sheriff Rogers, and the Sword-bearer, Mace-bearer, Sergeant-at-Arms and City Marshal. A moving sermon was preached by Père Ollivier, and then, outside the cathedral, Mons. Berthou, Minister of the Interior, delivered a superb funeral oration. "The tragic disaster of the Rue Jean Goujon," he declared, "borrows a greater horror still from the circumstances in which it took place. Death, needless and brutal, suddenly interrupted a festival of beneficence, and the victims whom it struck down have fallen on the *champs d'honneur* of charity."

It is painful to have to add that Père Ollivier's sermon, noble though its tone was at the outset, was marred at its conclusion by a marked inability to exclude bigotry and intolerance even in a moment such as this, for he drew an inference that the victims of the calamity had fallen "in expiation of the sins of French freethinkers", which naturally gave rise to a fiery altercation in the newspapers.

That the Socialist Press did not associate itself with the general profound sorrow need not surprise us overmuch ; we may regard it merely as another symptom of the general

ungraciousness which characterises that sorry creed. *L'Intransigeant* had the vile taste to describe the tragedy as "an expiation of the crime committed in Spain" by the execution of certain anarchists. Another disgustingly callous article, written by Louis Dubreuilh in the *Petite République*, in which he declared that "the existence of the ruling classes of plutocrats and of gamblers had been suppressed by death, the equaliser," so incensed Mons. Bruneau de Laborie, a well-known sportsman, that he wrote a letter which caused Dubreuilh to challenge him. The duel was fought in the woods of Meudon, four shots being exchanged without hurt to either party. However, too much importance must not be attached to the ill-bred snarlings of the Socialists, for they represented a negligible proportion of popular sentiment. The masses were touched to the heart at seeing the *élite* of their nation expire in agony on the altar of a charity undertaken with the aim of alleviating their lot.

In compiling this book and its precursor I have found occasion over and over again to notice how almost invariably some slight compensation becomes perceptible for the miseries of a great catastrophe, even if it be only a lesson to the world in the imperishable courage and fortitude of the human race. In the case of the Paris Bazaar tragedy we may find a tithe of such compensation in the circumstance that an amazing impetus was given to public enthusiasm for charitable works. The gifts received by the Parisian charities during the days which followed the disaster—and a high proportion came anonymously—exceeded by 600,000 francs the total of the previous year's receipts.

There was another respect, too, wherein good came out of evil, for soon after the affair the Prefect of Police was invited by the Minister of the Interior to take fresh measures to prevent risks of fire in Paris theatres and assembly-halls. Nor was anxiety arising from the unhappy occurrence confined to Paris. It was the subject of a perturbed discussion among the head officials of the London Fire Brigade, particularly in view of the special precautions against fire which would need to be taken during the forthcoming Jubilee celebrations. The calamity served to strengthen the Brigade authorities' opinion that more supervision ought to be entrusted to the chief officers of fire brigades over bazaars

and other buildings in which large concourses of people were massed together.

It only remains to be added that the courage of those who had laboured to save life during the fire did not go unrewarded, for forty-seven people received gold or silver medals for heroic rescue-work. But in this connection there came to the surface one infinitely pathetic little tragedy, for a certain poor labourer who had risked himself again and again to save the lives of others was found, when sought out for the purpose of being rewarded, to have gone raving mad. Canon Scott Holland, preaching in St. Paul's Cathedral, referred to this incident, saying: "In face of things like that there had better be no words, only prayer in silence before God, praying that He may give His own refreshment and His own peace to those who have been flung out of life in such a tumult of heat and agony."

**THE TRAGIC FATE OF
H.M.S. *CAPTAIN***

THE TRAGIC FATE OF H.M.S. *CAPTAIN*

THE turret-ship *Captain* was, one would say, possibly the strangest-looking vessel that ever stood on the Navy List. Turret-ships of sorts there had certainly been before 1870, but this vessel represented an entirely new departure. The deck of the first American Monitor had been level with the water, the turret only being added in order that there might be something to mount a gun upon; H.M.S. *Captain*, on the other hand, boasted a nominal freeboard of nine feet—low for a large man-of-war, certainly, but immensely high for a type of vessel originally visualised by its designer as a “shot-proof raft”. She was built, moreover, with a very large forecastle and a similar compartment aft, these being joined by a “hurricane-deck” which ran over the turrets, leaving a perfectly open space only occupied by the latter and the funnel-casing. A double-screwed ship of 4,272 tons and 900 horse-power, 320 feet in length and 53 in breadth, carrying four 25-ton and two 6-ton guns and protected by armour-plating as thick as eight inches on the most exposed portions, she was looked upon as the most formidable fighting man-of-war in the Navy. “She could, I believe,” stated the Vice-Admiral Sir Thomas Symonds, “destroy all the broadside ships of the Channel Squadron in detail”. But she was notable in addition as being the first ship with a low freeboard that had ever been full-masted and worked as a sailing-ship, and it was mainly in that respect that she could be described as experimental. This was stated in some quarters to be due to a strong desire on the part of the Admiralty to make all their fighting ships cruise under canvas as well as by steam; in the findings of the Naval Court of Inquiry which followed the *Captain* disaster, however, the Admiralty, as will later appear, disclaimed this responsibility in no uncertain terms.

The ship's obviously top-heavy construction aroused a good deal of unfavourable criticism, although nobody seems to have gone so far as to accuse her of actual unseaworthiness. Admiral Symonds, for example, expressed the opinion that a turret-ship ought to be a fighting ship pure and simple, without any masts or sails at all, and Captain Sherard Osborne, R.N., took occasion to warn his friend, Captain Cowper Phipps Coles, the deviser of the *Captain*, that if ever the leverage of the sails were to cant the low-sided ship over beyond a certain point, there would be a great danger of her failing to recover, and he urged both Coles and Burgoyne, who was the experimental vessel's captain, to furl all sails if caught in bad weather and bring the ship under steam, with her bow to the sea, to which both officers cordially agreed. It is clear, therefore, that a good deal of doubt as to the *Captain's* stability existed; and, indeed, the Chief Constructor of the Navy had expressed definite disapproval of building heavy-masted ships with low freeboards, while the Admiralty had only finally authorised the building of the *Captain* provided that he and the shipbuilders would assume full responsibility. The general public, however, was solid for Coles and his turret-ship scheme, as against the supporters of "broadside ships", though possibly it would have been less enthusiastic for full trial to be given his vessel had it been aware of the very grave circumstances that by an error the ship's hull and equipment had been estimated at 800 tons less than it actually reached, which meant an excess of nearly two feet in her draught. . . .

Captain Coles, despite his agreement with Osborne, sailed in the *Captain*, on what was destined to be her last cruise, in a spirit of boundless optimism. The ship had made first a preliminary trip from Liverpool to the Channel, then two voyages to Vigo, during which she had experienced a considerable variety of weather but had behaved perfectly throughout, and now Coles had volunteered to go in her again in order to watch over her sailing qualities and, if possible, effect further improvements in that respect. The *Captain* was, to use a homely expression, the apple of his eye—the realisation of hopes long deferred. Entering the Royal Navy in 1831, he had served in the *Agamemnon* at the assault of Sebastopol, where he had won a special mention in

despatches, and had distinguished himself likewise both at Kertch and during the operations in the Sea of Azoff. A year later his name had been brought prominently before the nation by the appointment of a Board by the Commander-in-Chief to report a plan devised by Coles for the construction of shot-proof rafts carrying guns and mortars. The Russian War had ended without anything further being done, but successive Governments had taken up the matter, and eventually the principle of "shield-ships" had been approved by the authorities. First the *Royal Sovereign* had been ordered to be adapted, and under Cole's supervision she had duly become a "turret-ship" in 1862. Then Sir J. Brunel had suggested to Coles the idea of placing the shield and gun on a turntable in preference to having to move the "raft" in order to point the gun, and from then on the Admiralty had proceeded to adapt other ships on greater or less modifications of Captain Cole's invention.

The controversy concerning the respective merits and disadvantages of turret-ships and broadside-ships had now been in progress for almost ten years, and it should be clearly understood that with the exception of the masts, which, together with spars, sails, rigging and blocks, weighed 125 tons, the chief features of the *Captain* were inseparable from a genuine type of turret-ship, and had their definite advantages; as, for example, that the low freeboard practically withdrew such a vessel from the fire of an enemy. In fact, as *The Times* afterwards expressed it, "what was the ruin of the *Captain* in the tempest would have been her salvation in battle". But the heavy, unwieldy masts were a factor to upset the balance of any calculation, and there was, besides, that unrealised business of the mistake about the weight of the hull and equipment. . . .

However, throughout the early part of the fateful cruise the *Captain* did everything to justify poor Coles' hopes. In a letter dated August 14th, 1870, he wrote that the *Inconstant*, the *Captain* and the *Hercules* had proved themselves the best ships under sail, the two first-named vessels having kept station and performed the evolution of "Port Division to become Starboard Division" by passing through the line without steam, whereas all the other ships had to make use of their engines. It is noteworthy, too, that the *Captain's*

personnel appear to have been perfectly satisfied with their floating home in all respects: "Until she foundered," declared James May, the gunner, during the Inquiry, "I considered that I was in the finest ship in the world!"

On September 6th Admiral Milne's Squadron, consisting of the *Lord Warden*, which was the flagship, the *Captain*, *Minotaur*, *Agincourt*, *Northumberland*, *Monarch*, *Hercules*, *Inconstant*, *Warrior*, *Bellerophon* and *Bristol*, was engaged in sailing trials in the Bay of Biscay. These commenced at 1 p.m. and were continued until 5 o'clock, and the Admiral mentions in his report that on the *Captain's* meeting a squall on her bow at a time when he was on board that vessel, her lee gunwale was level with the water and the sea washed over the lee side of her deck. However, this does not appear to have occasioned him any acute uneasiness, though he remarked to Coles that he "could not reconcile himself" to a state of things so unusual in his experience; and he had, as he emphatically states in the same report, the most perfect confidence in Captain Burgoyne, Commander Sheepshanks, and the other executive officers of the ship with whom he had come in contact. And well might he have confidence in Burgoyne. Captain Hugh Talbot Burgoyne, who was the only son of Field-Marshal Sir John Fox Burgoyne, had entered the Royal Navy in 1847 and been made a Commander in 1856. He had commanded the gunboat *Wrangler* at the taking of Kinburn, and had in 1857 been one of the first to win the Victoria Cross. He was a Knight of the Legion of Honour and was married to a daughter of Admiral Sir Baldwin Wake Walker. Also numbered among the *Captain's* officers were Midshipman the Hon. Arthur Napier Thomas Baring, second son of Lord Northbrook, Under-Secretary of State for War; Sub-Lieutenant Lord Lewis Gordon, brother to the Marquis of Huntly; Midshipman the Hon. William Reginald Herbert, third son of Lord and Lady Herbert of Lea and brother to the Earl of Pembroke; and Midshipman Goodfellow, a son of Dr. Goodfellow, Physician to the Middlesex Hospital. The *Captain* was by commission a West Country ship, and the majority of her company were closely connected with that part of England, at least one-third of the crew hailing from Plymouth. It should be added that she carried other visitors besides Captain Coles, among these

being two Greeks, namely, Mr. D. Sachtouris, son of an aide-de-camp to the King of the Hellenes, and Mr. P. Epites, a member of a family well known in Athens.

Admiral Milne returned to the *Lord Warden* at 5.30 p.m. The squadron was then formed into three divisions, led respectively by the flagship, the *Minotaur* and the *Agincourt*, and with the *Captain* astern of the *Lord Warden*. In this formation the ships moved in the direction of the rendezvous, a point 20 miles west of Cape Finisterre. Between 8 and 10 p.m., although the squadron was still experiencing perfectly normal weather, there were signs of "dirt" ahead, and Staff-Commander Kiddle, of H.M.S. *Minotaur*, recollected afterwards that he remarked to Captain Goodenough : "What a pity it is that we are compelled to stand deliberately into the centre of a gale." The trend of the land, however, prevented any other course being taken, and towards midnight the barometer had fallen so low, and the wind had taken on such force, that it became necessary to reef. An hour later a regular gale had set in at the south-west, and square sails were furled.

"At this time," reports the Admiral, "the *Captain* was still astern of the *Lord Warden*, apparently closing under steam. The signal 'Open Order' was made and at once answered ; and at about 1.15 a.m. she was on the *Lord Warden's* lee quarter, about 6 points abaft of the beam. From then till 1.30 I constantly watched the ship. . . . She was heeling over a good deal to starboard, with the wind on her port side. Her red bow light was all this time clearly seen. Some minutes after I again looked for her light, but it was thick with rain, and the light was no longer visible. The squalls of wind and rain were very heavy, and the *Lord Warden* was kept by the aid of the screw and after-trysails with her bow to a heavy cross-sea, and at times it was thought that the sea would have broken over her gunways.

"At 2.15 a.m. the gale had somewhat subsided, and the wind went round to north-west, but without any squall. The weather had moderated, the heavy bank of clouds had passed off to eastward, and the stars came out clear and bright, while the moon was just setting. *No large ship was seen near us where the CAPTAIN had been last observed*, although the lights of some were visible at a distance."

When day broke the squadron was somewhat scattered, and only ten ships could be discovered instead of eleven, the *Captain* being the missing one. It was thought at first that the absentee might have gone on towards the rendezvous, and the squadron accordingly bore in that direction. But no large vessel was to be seen from the masthead, and in at least one ship, the *Hercules*, the opinion was frankly expressed that the *Captain* had capsized—a thing half expected of her all along. Milne now became seriously alarmed; for were the *Captain* disabled she ought still to be within sight, while if undamaged she had no business to be elsewhere than in company with the squadron. The remaining ships, therefore, were sent out in different directions to make a search, but although they scoured the sea within a radius of 10 to 15 miles they still found no sign of the lost vessel. They were then recalled and formed in line abreast, and steered at three or four cables' distance apart towards the south-east to seek for wreckage.

The *Monarch* was the first to make a find—one of the *Captain's* topgallant yards; soon afterwards the *Lord Warden* came across another one, with sails bent, and then some studding-sail booms, while the *Hercules* made the ominous discovery of a broken boom with a silk neckerchief knotted to it. Then at sunset the squadron was joined by the *Psyche*, which reported that while steaming up from Vigo she had passed two white-painted cutters floating bottom-upwards together with a large mass of wreckage which was believed to be the *Captain's* hurricane-deck. And among the wreckage had been found the corpse of a seaman named Hart, still clinging tightly to a grating, without any lashing, even death not having sufficed to release the grip of the muscular fingers. . . .

It was then that Admiral Milne despatched the following telegram to the Admiralty :

I very much regret to have to send you painful intelligence. H.M.S. CAPTAIN must have foundered in the night. She was close to this ship at 2 this morning. Sudden s.w. gale; very heavy squalls. At daybreak, the CAPTAIN was missing. This afternoon her boats and spars found. All have unfortunately perished.

But he left H.M.S. *Monarch* at the anchorage of Corcubion Bay inside Cape Finisterre, with orders to search every practicable spot by land and sea for 50 miles where any of the crew could conceivably have made a landing, or where their remains might have been washed ashore. But the sea gave up little of its booty. A few more booms and yards, a spare masthead pendant, a piece of the standard compass, a smashed endboard and some bits of planking—these comprised the total yield.

At home the news was received at first with blank incredulity outside official circles; it seemed utterly impossible that a ship of the *Captain's* proportions, strength and magnitude could have succumbed to the mere violence of the sea. Yet the public disbelief must have had a strong undercurrent of misgiving, for the Plymouth and Devonport newspaper offices were besieged by frantic crowds, and throngs of people hoping for direct tidings haunted the jetties used for the landing of boats from the fleet.

And then, almost on the heels of the first message, came another; one of the *Captain's* boats had reached Corcubion on the 7th with eighteen survivors—James May, the gunner; James Ellis, the gunner's mate; Lewis Werry, captain of the foretop; James Harvey, second captain of the foretop; George Bride, coxswain of the pinnace; Charles Tregennan, leading seaman; and a dozen able-bodied and ordinary seamen and boys. All these had been members of the watch on deck, and from what they had to tell it was only too evident that to hope for any others having survived was futile: so swiftly had the catastrophe come to pass that not a soul could possibly have got up from below.

The receipt of these tidings from Finisterre resulted in a very sad occurrence at Devonport. A woman had become prematurely confined on hearing of the loss of the *Captain*, in which her husband was serving; she was dangerously ill, and, although there was just a slender chance of her recovery, the doctor hardly expected her to pull through. Now came the list of survivors, and—her husband's name was there! The doctor implored those about his patient to withhold the joyful news for a little while. But in vain, for they proved incapable of holding their tongues, with the

result he had foreseen : the sudden revulsion from grief to happiness was too much for the poor woman, and she died of shock, leaving six children motherless.

From the survivors it was now possible at last to learn what had really happened on that wild night in the Bay of Biscay, and a terrible story it was.

At the time when the really bad weather began the *Captain* was moving along rather laboriously astern of the *Lord Warden* under her three topsails, with double reefs in each, and the fore-topmast staysail ; the yards were braced sharp up, and, according to the depositions of Robert Hirst, an able-seaman who had been stationed on the forecandle, the ship did not seem to have much way on her. Captain Burgoyne, who was on the bridge, gave the order, "Let go foretop halyards ; plenty of hands go forward and man the downhaul !" and this order was promptly transmitted by Lieutenant Purdon, the officer of the watch. The halyards were let go, but the yard would not come down, and the watch, as one of them expressed it in his depositions, "could get nothing of the weather brace". Then came the order, "'Let go fore and main topsail sheets !' But by the time the men got to the topsail sheets," says Hirst, "the ship was heeling over to starboard so much that they were washed away off the deck, the ship lying down on her side as she was gradually turning over, and trembling with every blow which the short, jumping seas struck her, the sea now being white all round with the squall, and the noise of the steam from her funnel roaring horribly above everything."

As the ship heeled farther and farther over, Captain Burgoyne inquired sharply how many degrees she was canting, and was told, on reference to the pendulum, first "18 degrees", then "23 degrees", and, a moment later, "25 degrees". It would seem that once the vessel had a slight heel over, the pressure of a strong wind on the underpart of the hurricane-deck exerted a more powerful leverage on her hull than the wind did on her three topsails ; and it may be surmised, besides, that as soon as the *Captain* got her starboard side well down in the sea, what with the resultant weight of water on that side of the turret-deck and what with the terrific pressure of the wind blowing from

the port side on the under-surface of the hurricane-deck, she was simply "pushed" over, with no possible chance of ever righting herself again.

Be that as it might, it is certain that the movement indicated by the successive answers to Burgoyne's question about the ship's heeling was never checked for a moment ; for no sooner had the cant been announced as 25 degrees than she was right on her beam ends, "with the water pouring down the funnel, which was not sufficient, however, to drown the shrieks of the stokers". A bare few seconds after that the vessel was keel-uppermost ; for a short while she wallowed there like a wounded whale ; then slowly the stern dipped and the bows tilted up, and a few moments later she plunged suddenly downward and disappeared from view, "the fiendish roar of the steam from her boilers still forcing upwards and out-screaming the noise of the storm". Presently from somewhere far down in the black depths came the muffled report of a tremendous explosion. The air was filled for a few moments with horrible, cavernous gurgling ; then the sea rushed into the ship's vast, swirling grave, and almost immediately afterwards another vessel—presumably the *Inconstant*—passed over the very spot, and, like the rest of the squadron, disappeared again into the stormy night in complete ignorance of the grim tragedy just enacted. How grim it was we can only imagine, where the fate of the poor fellows imprisoned within the capsized hull was concerned ; the thought of the maiming and mangling that must have ensued as the engines, ammunition and other heavy gear carried away is too dreadful for contemplation ; we can only trust that the turrets, as some believe happened, fell out of their mountings, leaving two great orifices for the sea to pour through in merciful volume. . . .

Sufficiently terrible were the experiences narrated by the survivors, told though they were in sailormen's bald, unpretentious fashion. One mizzen-topman, as the ship turned turtle, scrambled on to the weather netting and ran up the mizzen tripod, but, finding the vessel still sinking, took to the water and was saved. David Dryburgh, too, crawled over the weather netting ; then he actually walked along the ship's side as she went over, and finally along her

bottom as she turned keel-upwards, and distinctly remembered putting his foot into one of her Kingston valves. "I felt the ship heel over," related another seaman, "and felt she would not right. I made for the weather hammock netting. She was then on her beam ends. I got along her bottom by degrees as she kept turning over, until I was where her keel would have been if she'd had one. The seas then washed me off. I saw a piece of wood about twenty yards off and swam to it. Two men caught hold of me and tore the legs of my trousers."

Little short of miraculous was the escape of Mr. May, the gunner. Awakened by some marines making a noise outside his cabin, and feeling that the ship was "knocking about", he dressed and went on deck to inspect his beloved guns and see if they were properly secured. As he entered the after-turret the ship went over, but he made his way out by an aperture, found himself in the water, and swam to safety. Another providential escape was that of Robert Hirst, who, with two other men, jumped overboard. Immediately afterwards they found themselves washed on to the bilge of the ship's bottom, but had no sooner got there than the ship made her dreadful plunge to the bottom. The three men were sucked down with her, but somewhere in the vortex of swirling waters Hirst came in contact with a spar, to which he tied himself with his black silk neckerchief. Later on he became detached from this refuge—doubtless it was his spar, decorated with the neckerchief, that the *Hercules* afterwards discovered—but managed to save himself by catching hold of the ship's second launch.

A remarkable experience, too, was that of James Ellis, the gunner's mate. Ordered by Captain Burgoyne to cover up the turrets with their tarpaulins, he took a hand named James Frost and went to the fore-turret. Just as they were endeavouring to lift a grating in the execution of this duty the ship went on her beam ends. Ellis, who was to leeward at the time, hung on to the grating, and, while he lay in that position, over his back went the first launch, which had been kept on the turret-top with the second launch and galley stowed inside it. He then went over with the ship, and, on coming to the surface, saw the launches floating about 15 yards away. On reaching the second

launch he found in it two men who had made a jump as the ship went down. With their assistance he succeeded in hauling in twelve more men, each man as he got in helping to save others.

A little distance away floated the steam-pinnace, bottom up, with Captain Burgoyne, Mr. May, and five others clinging to it. The gunner and two of his companions managed to jump on to the launch, but Burgoyne either could not or would not follow suit—it is not quite clear which—and when someone in the launch offered him an oar he declined it, exclaiming, "For God's sake, men, keep your oars ; you'll want them !" The launch and its occupants were then swept away by the heavy seas and, despite all efforts to get back to the capsized pinnace, lost sight of it. Thus did a very gallant officer and gentleman pass from human ken.

There were nineteen men in the launch originally, but during the attempt to return and save Captain Burgoyne one of their number said, "I think we're all right now," and scarcely were the words out of his mouth when a very heavy sea struck the boat and washed him overboard. The remaining eighteen then bore away for the land, which they knew was under their lee. The launch was by this time swamped up to her thwarts, but luckily they were able to rig the pump and bail her out, while they lightened her considerably by throwing overboard the mast and stay-tackles, and at noon of the 7th they were in Corcubion Bay, where H.M.S. *Monarch* picked them up.

So ended this vast tragedy of the sea, in which 483 splendid lives were lost to prove the emptiness of an enthusiast's faith in his creation—or was it to prove the futility of an Admiralty who overburdened his creation, to its undoing, through an outworn belief in the indispensability of sail ? The final verdict of the Naval Court of Inquiry is worth reproducing in full, if only for its avoidance of the main issue of fixing the responsibility for the calamity. It found that the *Captain* was lost "by the strength of the wind and the heave of the sea", and that the amount of sail carried at the time was "insufficient to have endangered a ship endowed with a proper amount of stability". And then followed this ingenious peroration : "The Court before

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separating find it their duty to record the conviction they entertain that the *Captain* was built in deference to public opinion as expressed in Parliament and through other channels, and in opposition to the views and opinions of the Controller of the Navy and his department, and that the evidence all tends to indicate that the Controller of the Navy and his department generally disapproved of her construction. The Court also expresses regret if the grave departure from the original design, whereby the draught was increased by two feet and the freeboard correspondingly diminished, was not communicated to the officer in command of the ship ; or that, if otherwise, the ship was allowed to be employed in the ordinary service of the Fleet before these facts had been sufficiently ascertained by calculations and experiment."

We need scarcely feel surprised, perhaps, if such a verdict failed to close the matter of the *Captain* disaster. The Naval Court had been held under the presidency of no less a person than Admiral Sir James Hope, K.C.B., Port Admiral and Naval Commander-in-Chief at Portsmouth. His own dissatisfaction at its pronouncement may be gauged by the fact that in transmitting it to the Admiralty he particularly drew attention to the absence of any remarks on the conduct of the *Captain's* officers ; and he went on to point out that the vessel, though she had ridden out the first squall under double-reefed topsails, had been capsized by the second, little greater in strength, which tended to argue that she would never have foundered had her topsails been lowered in good time.

Sir James Hope's observations drew from the Admiralty in due course an acrimonious reply in which regret was expressed that the Court had only been able to deliver a verdict couched in such indefinite, obscure, and sometimes inaccurate terms. This was followed in November by a minute written by Mr. Childers, First Lord of the Admiralty—the father, incidentally, of a midshipman drowned in the catastrophe—the main gist of which was as follows : Captain Coles and Messrs. Laird, the designer and builders respectively of the *Captain*, had accepted full responsibility for the ship's completion as an effective sea-going man-of-war, but it was the Controller who had

become responsible for her fitness to go to sea, and it was his business, if he had any reason to apprehend danger, to warn the First Sea Lord of his doubts; further, that the experiments to ascertain the position of the ship's centre of gravity and her curve of stability had been unduly postponed, while the Controller, when he did receive the report, ought to have had it communicated to Captain Burgoyne and the Commander-in-Chief of the Fleet. The Controller's reply to the Childers minute laid the blame in return on the First Lord, who had, he declared, received the report and should himself have communicated it to the Fleet if thought proper; and he went so far as to state that the *Captain* had been perfectly safe to go to sea if properly handled, instead of having had to carry more sail than any other ship in the Fleet on a squally night.

The wrangle was never conclusively settled, and in the meantime all sorts and conditions of men waged a similarly wordy warfare in the columns of the Press. Captain Sherard Osborne pointed out that Burgoyne's questions about the ship's angle of heeling just before she went over could only indicate that he had some idea of his own concerning her stability—probably an erroneous idea. Admiral J. Ryder attempted to simplify the issues by claiming that there had been two causes for the disaster, and two only, namely, that the *Captain's* centre of gravity was considerably above the line of flotation, whereas it ought to have been one-third below the line of flotation and two-thirds from the keelson, and that she was rigged with full heavy masts and spars instead of merely with jury-masts. Nor must we omit mention of Admiral H. J. Rous, who took the opportunity to resurrect the time-honoured controversy of sail *v.* steam: "The truth is," the worthy man wrote, "that the boiler has emasculated seamanship. No man can serve two masters—he will hold to the teakettle and despise the canvas."

Perhaps Osborne best summed up the true issue when he wrote, "The mania for sailing all our fleet, and endangering valuable ironclads, and still more precious lives, by manœuvring under canvas, as in the days of Benbow, has wrought its evil." At all events, the *Captain* disaster insured the discontinuance of that evil; it condemned for ever the low-freeboard turret-ship carrying masts and sails.

THE SILVERTOWN MUNITION-WORKS EXPLOSION

THE SILVERTOWN MUNITION-WORKS EXPLOSION

"The Ministry of Munitions regret to announce that an explosion occurred this evening at a munitions factory in the neighbourhood of London. It is feared that the explosion was attended by considerable loss of life and damage to property."

Thus ran the bare statement whereby the newspapers of January 20th, 1917, preserving that extreme caution which was so very necessary during the War years, vouchsafed to Londoners at least a meagre explanation of the strange phenomena which had so startled and bewildered them the previous evening. Accustomed though the past two and a half years had made them to the crash of high explosive, this event had been something utterly beyond their experience—something against which the most hardened nerves were not proof.

The night of the 19th was oppressively black ; not a star was visible in the inky heavens as London's myriads of workers hurried homewards through the darkened streets. But shortly before 7 o'clock the city abruptly became illuminated by a rosy glow that suffused the whole eastern sky, spreading rapidly to the zenith. "Against the fiery glow," eyewitnesses have stated, "the wonderful outline of the city formed a picturesque silhouette, with the dome of St. Paul's as its central feature. . . . People ran eastwards to be first on the scene of the fire. Then they suddenly stopped and gazed upwards. The light became brighter—a confusion of orange and salmon-pink, diffusing the sky with strange, almost unnatural colours. People held their breath and wondered. The light dissolved into a very pale yellow, and then came a brilliant burst of incandescence, so brilliant that all London could be seen as clearly as on a summer's day. . . . Puzzled

eyes were riveted to this startling, unexplainable panorama, when the ears caught a deep, hoarse, thunderous boom in the distance. The light in the sky faded, then disappeared altogether."

That stupendous detonation did not merely convulse all London and vibrate through the four counties adjoining ; it was experienced and wondered at in places far distant from the metropolis. It was heard at Grantham ; a window was broken by it at King's Lynn, Norfolk ; and at Radcliffe-on-Trent, 122 miles away, the shock was felt distinctly. On people in the heart of London the effects were stupefying, almost stunning. A boy in Camberwell had his bicycle lamp blown out. A dozen packers working in a factory near the river were flung right across the room and struck the wall on the opposite side with such force that several of them had bones broken, while two men standing near a window were hurled clean through it. Thousands upon thousands of windows were smashed in all districts ; on the eastward-facing side of Kingsway not a pane was left intact. Such were the effects at a comparatively long distance from Silvertown, which was the scene of the catastrophe ; it might easily be imagined, therefore, with what fearful violence the blast of the explosion struck the more neighbouring regions. The buildings rocked as though in the throes of a severe earthquake ; people were knocked down flat in the streets. Here is the experience of a policeman who was on point duty about a quarter of a mile from the spot : "The explosion," he says, "lifted me clean off my feet. I should think I went a yard into the air, and my helmet, which was torn off, seemed to go sky-high. The crash of glass was deafening." The most amazing incident of the explosion was probably the case of Corporal A. Haden, of the Life Guards, a patient in Southwark Military Hospital, to whom the shock gave back the use of his legs, and among the saddest was the case of a famous pianist, whom it bereft of his sanity.

It is interesting to note the diversity of explanations by which different people sought to account for the terrifying phenomena. One of my fellow members of the Authors' Club, for instance, who was in one of the front rooms facing

on to the river, immediately concluded, when the windows were suddenly blown in, that the Shot-Tower had blown up. Others imagined a Zeppelin raid on an unprecedented scale. My friend Mr. Thomas Freeman, who was walking across London Bridge at the time of the explosion, tells me that he was almost hurled into the Thames when the terrific blast came sweeping up the river, compressed and thereby intensified by the buildings on its banks; his first thought was, "The Boche is putting over something new," but beyond that vague impression his stunned senses refused to function. Mrs. Algernon Rose, wife of the Honorary Secretary of the Authors' Club, who lived in Hampstead, imagined that the house next door had fallen down. There is an element of humour in the explanation which was given in order to calm the alarmed women workers in the store of Messrs. Jones and Higgins, of Peckham: *they were told that a crate of crockery had been dropped!*

It is now time, however, for us to discover just what really had occurred.

Silvertown, as most of my readers are probably aware, is the district which abuts on the left bank of the Thames immediately south of the Albert Dock. It is a spot which I have heard described as "typical of the ugliest products of modern industry"—a district of railway lines, huge factories and warehouses, mean little houses and grubby little shops, where the sole touch of romance is provided by an occasional glimpse, through gaps between the buildings or over their gaunt roofs, of the funnels and masts of the shipping at the wharves.

Amid these unlovely scenes stood some works owned by Messrs. Brunner, Mond & Company, Limited, employed on the refining of explosives. The entrance was from the main road, and thence the works stretched down to the river. Almost opposite the establishment stood a fire-station, flanked by two enormous flour mills and a number of other factories, while beyond these extended an endless mass of warehouses, docks, wool-sheds and grain-elevators. The chief chemist of the works was Mr. Andrea Angel, an exceptionally able man who had taken a First Class in Chemistry at Oxford and whose peace-time vocation was

that of Lecturer in Natural Science at Brazenose College and Honorary Tutor in Chemistry to the non-collegiate students, with full control of all their preparation for the Final Honour School. Mr. Angel's wife was in charge of the girl munition-workers of the factory, but by a fortunate chance was away at the time of the disaster. Another merciful circumstance was that the explosion occurred after the departure of the majority of the hands employed in the surrounding buildings, who, it being a Friday, ceased work at from 5.30 to 6 p.m., so that only the foremen, the charge hands, and others engaged in clearing up were on the various premises. The chief exceptions to this were the flour mills. At the explosives factory itself most of the workers had left at 5.30. There remained the laboratory staff, some of the office staff, and a few hands engaged on some special work—a total, say, of forty people, about thirty-five of whom were on the high explosives plant.

As to the cause of the catastrophe, it scarcely needs to be said that there were the usual hasty rumours ascribing it to the work of an enemy agent ; of this, however, there was never a shadow of evidence, and it was completely discredited by the high police authorities. No more can be said than that the trouble began with an outbreak of fire in an upper floor of that part of the factory which was given over to high explosive. Whether or no the conflagration was originated by some careless worker who had evaded the stringent regulations against the introduction of combustibles it is impossible to state. It is a deplorable fact, however, that at the period under discussion the Courts were having to deal with only too many cases of that nature. On January 27th, five munition workers were sentenced to a month's imprisonment at a North Midland police court for having cigarettes and tobacco on them, and who had actually been caught smoking. On the same date three workers were at another Northern county court given a month's imprisonment with hard labour for taking matches into a T.N.T. factory where 4,000 people were employed, and within a month no less than 17 similar cases were dealt with at the same court.

Immediately the fire broke out the alarm was given by

the near-by fire-station to other stations in the district, and these were swift in responding. Unfortunately, however, the explosion, which came only ten minutes or so later, had the effect of breaking off all communication with the outside world for a while, the result being that some time elapsed before it was possible to obtain the assistance of the Metropolitan Fire Brigade. For the heroism displayed by the men of the local fire-station no praise is too high. Knowing fully the terrible destructive energy that was locked up in the flaming buildings, they performed their duty fearlessly. They just had time to run out the hose and direct a stream of water on the flames before the awful blast of the explosion shattered their engine to smithereens, killed two men outright and severely injured the remainder. In all the splendid annals of the Fire Brigade there is no finer story. However, we are anticipating. . . .

For the first few moments after the building caught alight the inhabitants of the district in general do not seem to have realised their imminent peril ; people stood about in the streets or at the doors of their houses to stare at the conflagration. Some there were, however, who did comprehend in full measure exactly what was about to occur. One such was the watchman. But his thoughts were not of his own salvation ; far from taking to his heels, he deliberately ran back to open the gates for the firemen to get in and the employees to get out. Another instance of noble self-sacrifice was that of a policeman on duty in close proximity to the factory, who stayed behind to hurry on the crowds of folk who lingered to gaze in fascination at the blaze. Afterwards, as he lay tossing in delirium in one of the hospitals, his one anxiety still was to know what had happened to the people as they ran away. Then there was the case of one of the men working at the factory who, hearing cries for help, looked into one of the lower rooms and saw three girls lying helpless on the floor. To save them all was beyond the bounds of hope. One he did succeed in hauling out through the window, however, and rushed from the vicinity of the building with her in his arms. He had just contrived to drop her over a fence on to the railway lines when the explosion burst about them. Wonderful to relate, neither was injured, though

the man had only been able to cover a few yards in the short time at his disposal.

But of all the heroism which marked those fleeting minutes of supreme tension, the most outstanding was that of Andrea Angel, the chemist. Angel was in his quarters in another part of the works, when one of the women employees came rushing in with the awful news that the explosives building was alight. Without a moment's hesitation he left his office, ran to the doomed building, told the workpeople to make all haste away, and then, utterly regardless of his own safety, gave his help to the gallant firemen in their efforts to quell the flames. His body was afterwards identified only by the clothing. It is satisfactory to be able to add that the directors of the munition works promised that the care of his wife and child should be their primary consideration.

No words are adequate to convey the titanic violence of the explosion when it came. When I mention that one of my friends who experienced its force at a distance of six miles was so dazed that he walked about aimlessly for two hours before he could find his way home, my readers will perhaps care to try to imagine the force with which its blast smote those who were so unfortunate as to be near at hand. The irregular oblong over which it vented its worst fury measured 400 yards by 300 yards, and within those bounds no property whatever escaped destruction. A boiler weighing three or four tons was hurled into a field a quarter of a mile from the scene. A chemical factory, a flour mill and a number of smaller storehouses and workshops were utterly demolished. As for the half-dozen or so streets of working-class dwelling-houses opposite the chemical factory they were practically pulverised. "Scores of houses were utterly razed," writes an eyewitness. "Roofs and walls were blown away, floors collapsed, and homes in which owners had taken the greatest pride instantaneously became hideous piles of shapeless wreckage. Men, women and children were buried in the ruins, some battered to death, others less gravely hurt. Infants were killed in their beds. Men and women and lads and girls were struck down as they sat and talked." The fire-station was blown to fragments, and Winifred Snell, the fifteen-year-old

daughter of one of the firemen, was picked up afterwards in an adjoining field with her back broken.

The main force of the explosion struck westwards, and by a fortunate chance it was in the easterly direction that the majority of the people fled. The confusion of that panic-stricken hegira was almost beyond description, for it was some time, naturally, before any system could be organised to deal with the mob of terrified women and children who rushed haphazard into the night before the awful blast which had brought their homes crashing to the ground. Innumerable children became separated from their parents, but before long most of the little strays were being shepherded together by kindly folk whose houses had remained intact, or directed to halls or schools where accommodation could be arranged for them. Moreover—such is the depth of human compassion in times of crisis—people disrobed themselves of their outer garments in the bitterly cold, wet weather in order to wrap up the shivering forms of the homeless children.

For a considerable distance from the factory the air, immediately after the explosion, was thick with flying débris of all sorts, which rained down mercilessly upon the droves of wretched fugitives, in many cases inflicting head-wounds or breaking their limbs. "Some were smitten and woefully injured by the jagged masses of iron, fragments of masonry, and baulks of timber which came hurtling through the air. Others miraculously came scatheless through the hailing, tumbling tempest of death."

We shall be better enabled to realise in some degree what the people of Silvertown underwent that night if we consider the stories which a few of them told afterwards of their experiences. "I was at work in the office," relates one survivor, "when I heard women shrieking. I came down to the door and saw the H.E. building thoroughly afire. Somehow, providentially, I was able to get away without a scratch, though others going along the road were knocked down beside me by flying missiles hurled in all directions by the explosion. The force of the explosive seemed to take a curious zigzag course, and it must have missed me, though I could not have been more than two hundred yards away. My first thought when I saw the

whole plant aflame was, 'This is the end of all things for me.' All I am clearly conscious of was a rain of heavy things falling continually in front of me."

There were numerous freakish circumstances to illustrate the truth of what this witness says about the zigzag course taken by the explosion. A little more than one hundred yards east from the centre of the upheaval, for instance, a pyramid of at least one thousand barrels remained completely undisturbed. Another curious spectacle next day was that of a jeweller's shop, full of watches and trinkets, with not a crack in its plate-glass front or a single one of its array of brooches and rings shaken out of position, though all around the devastation was frightful. Again, there was a dwelling in which the inhabitants had just arranged a meal in one of the back rooms: the front of the house was entirely blown away, yet never a cup or plate was disturbed on the table!

A night watchman in one of the factory buildings had a truly providential escape. "I was sitting in my little box when the explosion happened," says he. "I saw a blinding light; a moment later half a ton of iron crashed down from above within a yard of me. Then the entire sky seemed full of falling wood and iron in masses. Something hit me and I fell unconscious. Presently I came to—it can only have been a few minutes—and I found myself under a sort of shelter of wooden planks. I crawled out, and here I am with only a scratch on my forehead."

"I heard a terrific report," tells another man, a resident in the central main road, "and immediately afterwards felt myself lifted bodily off my feet. The next I knew was that I was outside in the street. The door had been carried away, and I had gone through, I suppose, after it."

One extremely fortunate circumstance was that from the very first there was adequate medical aid for the sufferers. "The magnitude of the explosion carried its own message to hospitals, doctors, nurses and Red Cross workers, and ambulance workers living miles away simply followed the ruby glow in the sky till they came to the scene of the disaster." During the first hour, wheelbarrows, lorries, tradesmen's carts—any vehicles, in fact, that came handy—were quickly turned to use as ambulances, while every

available taxi, too, was commandeered, the passengers willingly giving them up and the drivers making no demur. The doctors were soon hard at work in improvised dressing-stations made from doors taken off their hinges, and as soon as first aid had been administered the victims were packed off either to hospital or to private houses generously thrown open by their owners for the reception of the afflicted. A special word of praise must be given to the members of the Order of St. John of Jerusalem, who not only toiled without cessation throughout the first terrible hours, but maintained a first-aid station for many days afterwards in the very heart of the devastated area, ready either to deal with any victim who might be found in the ruins still alive or to dress minor injuries for the troops engaged in excavation work and the hosts of people who came to search their demolished homes for household belongings.

To save any poor folk who might be lying alive but helpless among the ruins of the industrial buildings was a task practically beyond human power, for the fire continued to blaze furiously, fed from the stores of chemicals and oil on the premises ; while, to make matters worse, a gasometer had been damaged by the explosion and its escaping contents had ignited, producing a pillar of flame which soared high aloft and was visible for many miles. The hospitals, as may easily be imagined, had to work at top pressure. Seventy cases were taken to Poplar Hospital, and of these thirty-six were admitted ; one hundred and fifty out-patients were treated at the London Hospital, and thirty-two received as in-patients. The following extracts from the report of the house governor of the last-named establishment convey a vivid impression of the atmosphere during and immediately after the catastrophe :

The hospital distinctly moved—a rocking movement. 231 windows broken. Somebody screamed, otherwise no alarm. . . . Police station rang up ; reported enormous explosion ; short of doctors ; could we send any ? Got five men and three lady doctors ; cab of dressings ; instruments ; morphia ; chloroform, etc. One cabman refused to go ; abusive ; was not going for anybody. Porter took his number. Gentleman in car, although ten miles out of London, drove to hospital at once and picked

up dressers and dressings. . . . Police rang up. How many patients could we take in? Replied any number. . . . Office sisters worked like niggers making beds. . . . Injured people soon came up in motor-lorries, butchers' carts—all sorts of vehicles. Treated about 60 and then a lull. . . . Children were brought up not always injured but dazed. One child of eight with baby in arms and leading child of four. Couldn't find mother. Kindly driver had picked them up in destroyed streets. . . . Little dog came up with one fearfully injured woman. It wouldn't leave her. We let it go into the ward with her. . . . The taxis returned: "Could do nothing. Never saw such a sight. A square mile blazing. Houses by the hundred a mass of bricks. Must be hundreds buried. Heat fearful. Could only get near by tying shawls round head. No good waiting." All very upset at sight. . . .

Pitiful in the extreme was the plight of some of the children referred to by the writer of the above. In one instance four young children were admitted to hospital, one of whom, a sweetly pretty little girl, had her right arm blown off. In a cot a few paces away lay the dead body of her brother. And one doctor related the case of a little girl who had been taken from a demolished house, but had somehow managed to cling to her doll, which bore several ominous bloodstains on its face. The child was enormously concerned to know whether her doll would get over its supposed injuries, and her delight knew no bounds when the kindly doctor, having wiped away the bloodstains, reported it none the worse for its experiences!

In only too many families there were children missing altogether. A notably pathetic case was that of a woman who rushed from her home with a baby in her arms and, the moment she got outside, met the full force of the explosion. The child was wrenched out of her grasp as though by some giant hand: as the poor woman fell senseless, the last vision vouchsafed to her dimming eyes was that of her little one being overwhelmed by a great avalanche of débris. When she recovered consciousness she began to dig desperately with her bare hands among the heaped up bricks and rubble. How long she toiled thus is not known, but quite late at night she was discovered prostrate

near the wreckage, with four fingers broken by her own frenzied efforts. She had reached down to her child and it was dead. . . .

Silvertown, hideous enough at the best of times, presented a truly frightful aspect following the explosion—an aspect which made the crowds of sightseers stand aghast. “Moving down river, one saw a dull red reflection low in the sky. Led by this, one came at last near the scene of the disaster. Behind the masts and spars of ships in dock stood a cluster of blazing buildings, from which rose huge forked tongues of flame and rolling columns of smoke and steam. Every few minutes a motor ambulance swung by, carrying away the injured. . . .

“Watchers from the railway bridges could see a broad sheet of fiery embers, orange and red, over the surface of which little flames rippled and leaped. Out of this incandescent mass rose two tall towers, which flamed like gigantic beacons. One burned steadily and was silhouetted in its own fire. The other blazed more fiercely, and at intervals sent up geysers of golden light which for a moment brightened the overhead canopy and made people at a distance think the conflagration was still widening its bounds.”

The most amazing thing of all was a huge crater which marked the site of the chemical works where the explosion had occurred. Little was left of the factory, and that little was spread in distorted fragments over a wide area. The explosion had dug deeply into the ground and flung up in a wide, irregular circle a mass of grey-coloured clay. Over an area 50 yards across nothing was to be seen but this gaping crater, while beyond its elevated rim were the fire-rusted walls of two tanks, “crumpled and bent like tins on which a man had stamped with heavy feet”, and, in the farther background, the skeleton walls of the ruined factories at the fringe of the devastated region, with the three towers of the flour mill standing like grim sentinels on the north side of the road. And everywhere among the tumbled brickwork lay twisted pieces of iron girders, unrecognisable parts of machines, huge sections of boiler-casing, and railway lines twisted into fantastic knots.

“It is as dreadful a scene of desolation as any to be seen at the front,” wrote one observer ; “a smouldering, steaming

nothing. Frantic, writhed nothings that once were iron girders or pieces of efficient machinery ; lumps of nothing that once were brick or stone. . . . Milton, who drew Chaos, could describe it ; those who fled from Pompeii might recognise it. . . . Walk for miles on any side of the site of the disaster, and you cannot get away from the effects. There are streets upon streets where warehouses look like waste paper in the basket ; where dwellings have been ripped open ; and where the lead-moulding of church windows seems to claw at the air, and roofs have been smashed in as if with a gigantic fist. The caprice of these blind forces is as strange as their power. They will leap half a street to vent their rage upon a single house. They will blow out a whole house-front and leave a little clock secure on its bracket.

"Here, from within the prohibited area, comes a covered cart. The police and some few of the onlookers know what it contains and whither it is bound. It is going to the schoolhouse that is turned into a mortuary, and it contains human bodies—'at least,' says one who has knowledge at first hand, 'they once belonged to human bodies'." Indeed, one young man who assisted in the search of the wreckage declared that he had seen at least 60 severed legs and arms.

The recovery of the dead was a slow and difficult business, nor could a reliable list of the injured be compiled for many days, owing to these being distributed among so many hospitals and private homes. It was not until the 24th, in fact, that official figures were published : killed, 69 ; seriously injured, 72 ; slightly injured, 328. An insurance assessor estimated the material damage at approximately £2,000,000 to £2,500,000. Of people rendered homeless there were more than 1,000, and to fend for these an Emergency Committee was set up immediately. Within 24 hours the destitute were all housed and being cared for, the centres including three mission-halls, a tabernacle and two schools. Then came the task of finding more permanent quarters ; a Housing Committee was formed by the Mayor, assisted by the clergy of all denominations, and by the 27th an option had been secured on 150 bungalows and arrangements made for 200 beds in a

men's hostel and 200 more in a similar establishment for women. The Waifs and Strays Society expressed its readiness to receive into its homes any children who might have lost their parents through the catastrophe.

The Salvation Army, always prompt to translate words into deeds, performed gallant service. Their hall in the district was made the centre for the distribution of food and clothes under the direction of Major Catherine Booth, while Commander Adelaide Cox placed 100 beds at the disposal of the sufferers in the Women's Social Department. But soon the helpers were themselves in need of help, food and drink, and this became the special concern of the Y.M.C.A. Four Army motor lorries were converted into canteens; in these, and at a police-station, women workers under Lady Henry Grosvenor toiled indefatigably at cutting up bread and butter, making sandwiches, and packing cakes and biscuits. A thousand loaves were cut up in less than 24 hours.

To relieve the distress of the victims the National Relief Fund was drawn upon in the first instance, but there were numerous cases to which the Fund could not be applied, and to deal with these subscription lists were opened. The nation's response, led by the Royal Family, was generous in the extreme. A particularly touching action was that of the wounded soldiers at the Third London General Hospital, Wandsworth, who raised a subscription on the grounds of a feeling "that a deep debt is owing to the munition workers by the men at the front".

The inquest on the victims was opened at the London Hospital on January 22nd, and many were the tragic stories then revealed. One elderly woman, Mrs. Preston, was identified by her son. Badly injured himself by flying glass, he had hastened to his shattered home and there found his mother buried under the rubble with both eyes destroyed and other terrible hurts. Her left leg had had to be amputated, and later the poor soul had died of shock. Another case was that of an unidentified woman covered from head to foot with fine dust which had driven right into the skin. Mrs. James Mason identified the corpse of her nine-year-old son. At 6.30 p.m. she had sent him, with his little sister, to pay the coal-club money. Twenty

minutes later had come the explosion, which blew the roof off her house. She had run as far as the railway station, where she met her little daughter, "as black as charcoal". When asked where her brother was the girl had replied, "I don't know; I saw some black smoke, and he went one way and I went another." Nothing had been heard of the boy until the Saturday afternoon, when he was found unconscious in the London Hospital, and there the poor little fellow had died next morning.

A public funeral service was held for all who had lost their lives in the calamity, the Bishops of Chelmsford and Barking assisting to officiate. Following this, twelve victims were laid to rest in the East London General Cemetery. The procession, consisting of doctors and nurses, Salvation Army sisters, members of trade unions and friendly societies, and detachments of police and volunteers, was led by the Salvation Army International Staff Band, and hymns were sung at the graveside amid falling snow.

But those were the days when "Carry On" was the nation's watchword, the days when every sorrow, private or public, must of necessity be subordinated to the urgencies of the world-struggle in progress. The great Silvertown tragedy was a thing of the past; its victims were buried, and now must come the labour of reconstruction. The spirit which animated the neighbourhood was well exemplified by a man who was encountered carrying a wooden box which contained all that was left of his home. "It might have been worse," he remarked with a courageous smile. "Half a boiler came through the roof, the windows were all blown out, and the furniture all smashed. But none of us was hurt, and that's the main thing!"

THE “BLACK HOLE” OF PARIS—1903

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THE dreadful affair which came to pass on the Metropolitan Underground Electric Railway of Paris on the night of August 10th, 1903, aroused popular feelings entirely different from those caused by the generality of railway accidents, however serious the casualties. The "Metro", though still a comparative novelty, had already come to form a recognised part of the daily life of thousands of Parisians. Rapidly augmenting congestion of street-traffic had stimulated the construction of a whole network of underground lines; the working population had become accustomed to rely implicitly on this new means of transport, so swift and so efficient; and when with stunning suddenness the great fatality occurred, the news was received at first with incredulity. It was incredulity which, when the thing was actually happening, predominated even in the minds of the doomed passengers themselves until a few short minutes before the advent of the horrible death which awaited them. . . .

Despite public confidence in the "Metro", there seems to be no doubt that expert voices had uttered a sufficiency of grave warnings before the time of the calamity. Four to five months previously, for instance, *Le Metro*, the organ of the railway employees and certain affiliated trades, had complained of the working of the line and demonstrated in plain terms the dangers involved by the cheap and inefficient labour employed, the continual changes of staff, and the insufficient number of hands kept at work. Again, certain officers of the Paris Fire Brigade who had been members of the Special Commission appointed to consider the "Metro" project, had protested vigorously but in vain against the total absence of airshafts to ventilate the tunnels. The Committee of Hygiene in the Twelfth District, too, had expressed concern, not once but over and over again, at the

lack of ventilation, the insufficiency of means of egress, and the small size of the stations. But, as so often happens, the responsible authorities had merely listened with thinly veiled impatience to these prophets of gloom and straightway dismissed their forebodings from mind, only to realise when it was too late that they had been right after all.

The catastrophe happened on the portion of the Metropolitan Railway which runs under the exterior Boulevards between Belleville and Ménilmontant, a densely populated quarter inhabited almost exclusively by working-class people, and the trouble began at 7.35 p.m., when Train Number 43, coming from the Dauphine station, was forced to stop at the Gare Barbès through its motor being out of order. Indeed, it was emphatically stated afterwards by one of the Metropolitan's engine-drivers that the motor was in a defective condition before ever the train started, and ought not to have been used till it had undergone considerable repairs. At noon of that very day, moreover, the train had had to be taken off the line because the compressed-air brake failed to work.

Be that as it may, the train could not proceed, and the only thing to be done seemed to be for Train Number 52, which was following it at a short interval, to push it on to the terminus. Accordingly, the passengers of both trains were made to alight and transferred to a third train, Number 48, which was likewise travelling at a little distance behind. Trains Number 43 and Number 52 then proceeded onward connected together, Number 48 moving in their wake with its treble load of passengers. In this fashion the procession passed through a number of stations, and all went well until it had almost reached that of Les Couronnes. At this point it was suddenly discovered that the leading coach was on fire.

Exactly how this had come about was a much-debated question in the discussions which raged afterwards, but the generally accepted belief was that the fire must have arisen through a short-circuit in the wire connecting the motor with other parts of the train, which ran under the body of the car. There was little doubt, however, as to how the officials ought to have handled the situation, and that most emphatically they acted on wrong lines. "Before the two empty trains got to Couronnes," says the Station-master

of that place, "flames had burst through the floor of the disabled train and were leaping up towards the doors and windows of the carriages containing ten terrified railway employees. . . . In passing Les Couronnes station the trains slackened speed. I was standing on the platform and gesticulated to them, calling out to the engine-driver on the second train, 'Stop, stop ; you will never have time to reach the terminus !' He replied, 'Never you mind, we'll get there all right,' and the two trains dashed into the tunnel, putting on full speed on their way to the Gare de Ménil-montant."

Opinion was unanimous that the driver should never have taken the risk of going on. In an interview with *Gil Blas*, Mons. Bienvenue, principal engineer of the Metropolitan Railway, said: "There would have been no accident to deplore if the employees had remembered that there was a special siding for broken-down carriages, or carriages which have caught fire, between the Combat and Belleville stations." But Chauvin, the driver, when asked why he had not shunted into this special siding as soon as the fire was discovered, swore that he had been unable to divert his train because the points at Belleville station had not been working. However, it seems clear that, quite apart from the question of the siding, he did wrong in going on. "It would certainly have been better," stated an eminent electrical engineer, "to have extinguished the fire in the open, where the breakdown first occurred, than to have run the risk of pushing the train into the tunnel in a hopeless attempt to reach the terminus at the Place de la Nation. I am inclined to think that the driver of the train lost his presence of mind. He had a considerable section to run in the open air before he entered the tunnel, and no doubt the speed at which he went fanned the flames from the overheated motor and caused them to spread. . . . It is very difficult to deal with a fire on an electric railway, because water cannot be used while the current is on without instant danger. It would have been better to have dealt with the train in the open by cutting off the current and then calling in firemen to put out the flames. Traffic would have been suspended, but that would have been better than attempting to reach the terminus."

The trains, then, disappeared in succession into the mouth of the tunnel, heading for Ménilmontant. As they were nearing that station, however, there was suddenly a violent explosion, and a long blue flame burst out between the car at the head containing the motor, and one of the central carriages. "In an instant," relates the Couronnes station-master, "all the eight carriages were on fire, and the employees had barely time to fly for their lives. The flames rose to the roof of the tunnel, and, following the wall, fused the electric-light wires. This plunged the tunnel in darkness, while the station itself was lit up by the flames. The current was cut off, and Train Number 48 was brought to a standstill between the Belleville and Couronnes stations, at a distance of about 300 metres from the burning carriages."

It might have been supposed that the passengers in this last-named train, when told what was happening on the line ahead, would have had the elementary sense to get as far away as possible from the scene of the conflagration with all speed. A crowd, however—and perhaps a Latin crowd in especial—can be incredibly mulish on occasion, and this particular crowd chose that ill-timed moment to indulge in a piece of stupid obstinacy which was to cost them dear. Let Mons. Chedal, the guard of Train Number 48, take up the tale and narrate his amazing experience with the 350 people under his care.

"Suddenly," says he, "I discovered a thick smoke coming from the direction of the Ménilmontant station. Apprehending the danger, I shouted to the passengers to get out. At the same time I rushed to the telephone to request the authorities at the Belleville station to cut the current, but the telephone did not work. I called the guard and asked him to run on to the Belleville station by way of the Boulevards. He at once set off. Meanwhile, the station staff were advising the passengers to leave the carriages, but they would not hear of it and replied, 'We've been made to get out at Barbès ; we've had enough of that !'

"They then surrounded me and demanded the refunding of their fares. I replied to them, 'You will be repaid later on ; save yourselves !' But they would not listen to me. They threatened me, and I received several blows from their fists. The gathering which had formed around me prevented

the people in the last carriage from reaching the exit staircase, which the greater number of passengers had finally succeeded in doing.

"Suddenly the electric light went out, and in the darkness a terrible crush ensued. Piercing cries rent the air for some seconds, but we were soon choked by the smoke, which kept our mouths shut. I had wax matches lit, but the smoke immediately extinguished them. I groped my way along close to the wall, as I knew that the exit was at the left extremity of the arrival platform. I walked along the platform towards it. In following the wall I came upon a being whose arms were fighting with the darkness. I seized it and dragged it along with me. When we reached the steps of the exit, I felt that the person I was taking with me was growing faint. I myself began to be stifled and my head turned. I made a last effort to mount a few steps. On reaching the top we fell, both myself and the woman whom I had taken along with me—for it was a woman whom I had seized in the darkness. Very fortunately help speedily came to us. The rescuers lifted us up and took us into a chemist's shop."

The scenes which were enacted down there in the darkness as the passengers, after losing so much valuable time in vain argument, realised their peril at last and were seized with panic, are more easily imagined than described. "Heartrending shrieks and cries for help rose on every side, and men and women fought like beasts for air and liberty," states the Couronnes station-master. Some endeavoured to make their escape in the direction of the Rue des Couronnes, others attempted to grope their way to the Belleville egress, and the result was confusion of the wildest. Many of those who were fortunate enough to reach one or other of the exits were already half suffocated and collapsed at the foot of the stairs. Seven persons were taken in a state of unconsciousness from the Couronnes station to the neighbouring chemist's shop mentioned by Mons. Chedal.

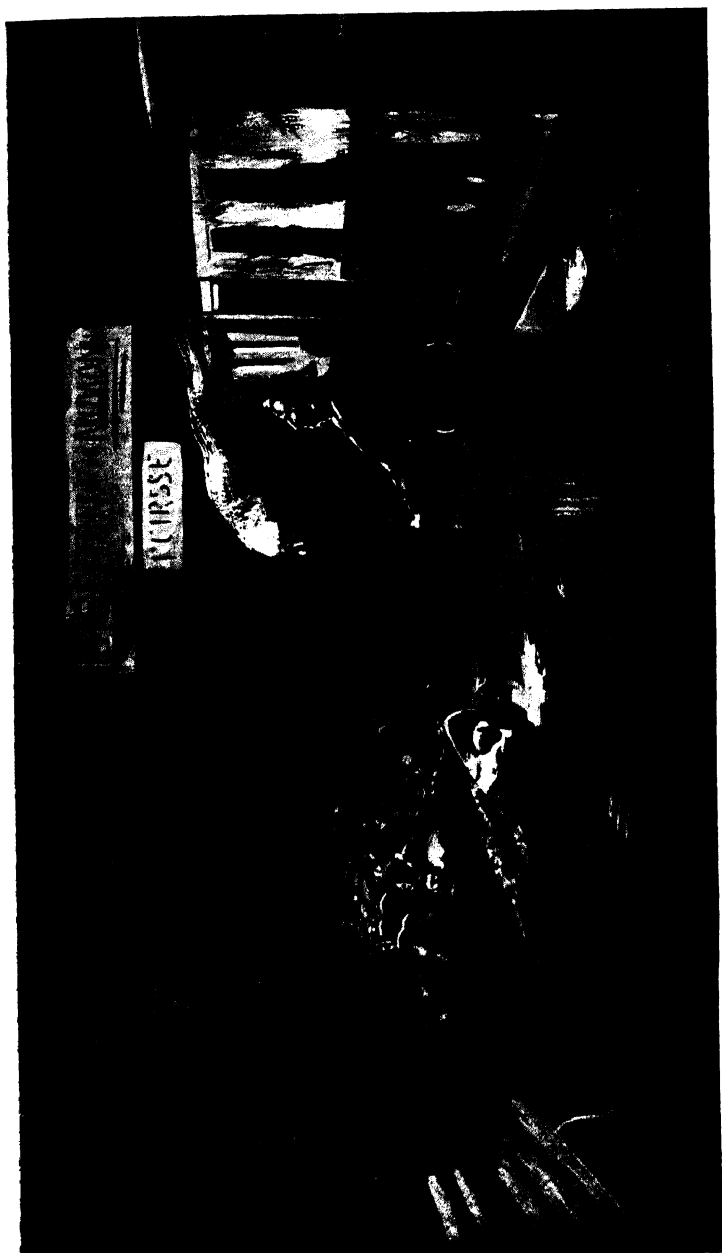
There was another piece of monumental crowd-stupidity, too, besides the folly of those passengers who wanted their money back, as appears from the story of Mons. Alfred Martin, who narrated to *Le Temps* the experiences of himself and his wife. "At the Gare des Couronnes," says

Mons. Martin, "there was another stop. The travellers became impatient and swore, or else they laughed and joked, but none of them was conscious of the impending danger. The stationmaster was about to give the signal of departure when two terrified employees came along shouting, '*Sauve qui peut !*' There was a scene of rushing and scrambling ; the dominant note, however, was not fright, but rather incredulity and fear of being the victims of a practical joke. However, the bulk of the travellers, and we with them, moved towards the stairs."

And now comes the piece of egregious, almost incredible stupidity. "It was impossible, however, to get out into the street. The stairs of the Gare des Couronnes were encumbered by people coming down to take the train. *They did not want to make way for us ; although we told them there was a serious accident, they received our words derisively.* For some moments both my wife and I were hustled between two laughing and good-humoured crowds.

"The two streams of traffic were thus at a standstill at the foot of the stairs. The crush was awful. A small column of smoke was already advancing from the direction of Ménilmontant. At that moment I had an inspiration. Had I remained with my unfortunate companions at the station of the Rue des Couronnes I would have probably lost my life. But wishing to spare my wife, who was almost fainting, the ordeal of a crush, I took her by the arm and said, 'Let us walk back to Belleville.' We stepped on the line with about ten other people and we started.

"Hardly had we gone ten yards in the tunnel when the light failed. We were in total darkness ; we shouted, we called, and an employee arrived carrying a red lantern. He placed himself at the head of the party and we proceeded. The smoke, which was becoming thicker every minute, drove us before it. I had the feeling that one or two people behind us were falling. I heard a woman's cry, but I had all the trouble in the world to hold out myself and to support my wife, who was tottering. I did not turn my head, nor did anyone else, so completely absorbed were we by the instinct of self-preservation. We arrived at the station of Belleville, which was crowded. The people thronging the staircase did not wish to go up. *They were calling out for their*



BLACK HOLE OF PARIS

three-halfpence. We cried, we entreated, but they would not give way to us. However, we had to get out. We were up to our necks in smoke. I sprang forward with my fists extended and we managed to get up the staircase."

Madame Justinel, of the Rue des Couronnes, describes an even more trying struggle. "I got into the train at the Place de la Nation. I thought something was wrong and wanted to get out, but they wouldn't let me. When we passed Ménilmontant I saw a red glare from the flames of the burning train. . . . After we had got out of the train everybody was scratching, biting and tearing desperately in their efforts to escape suffocation. I could feel the smoke catching at my throat and choking me, and at my side a mother and daughter fell unconscious to the ground. I never saw them again. My clothes were all in shreds when I reached the street, helped up the staircase by two men, who fought their way through the smoke towards me. . . . My ribs were sore afterwards, and I can remember that I fell several times after leaving the carriage, and people tried to trample on me."

We have now studied with some thoroughness the various accounts given by the station-master of Les Couronnes, the guard of Train Number 48, and two passengers, and in all these narrations one thing is strikingly evident. Although each of these survivors lays great stress on the desperate struggle for life and liberty that went on in the dark tunnel, and although we hear a good deal about the absurd folly of the passengers who risked their existence to wrangle over the return of a three-halfpenny fare, and the equally crass stupidity of the descending throng who refused to believe that an accident really had happened, there is not one word to indicate that the narrators themselves realised at the time that anything worse had occurred than a mishap resulting in a severe but transitory phase of peril and discomfort. The fact is, of course, that these were people who all had the good fortune to be in the forefront of the stampede. It was impossible for them to know then—or even, for that matter, at the time when they gasped out their experiences to the eager pressmen—that in the depths behind them, prevented from ascending to comparative safety by these unnecessary delays which caused themselves such distress, was a

congested drove of their fellow passengers enveloped in the full volume of the fumes, choking and blinded, groping in futile impotence for the means of egress they never were to find. . . .

For it was not realised by anyone until a comparatively long time had elapsed that the passengers were by no means all accounted for. Around the Couronnes station stood a crowd of awe-stricken spectators watching dense clouds of smoke pour sluggishly forth from its mouth. They witnessed the arrival of the Fire Brigade, heard the firemen's report soon afterwards that down below the heat was too intense and the smoke too thick for them to be able to advance far enough to examine the line. This seemed of relatively small importance, however, since it was generally understood that there had been no casualties at all, or at all events that they had been confined to a few fainting women.

About 2 a.m.—some six hours after the accident, that is to say—a fireman wearing a respirator made an effort to enter Ménilmontant station, but even protected thus was obliged to return. One of his comrades who renewed the attempt a little later reported that all he could make out in the tunnel was the glow of the red-hot rails, crossed by smouldering sleepers. At an early hour of the morning, however, a third descent was made, and this time the searchers found that which turned them sick with horror. In Ménilmontant station, huddled together near the ticket-office, were seven corpses. But it was at the Couronnes station that the largest number of victims was discovered. Here they lay piled in a great mound against a blank wall at the end of the platform—people of both sexes and all ages, mostly of the labouring class, and all dead by suffocation. "They presented a horrible spectacle which recalled to the Parisians the terrible sights of the Charity Bazaar in May, 1897," said the stationmaster of Les Couronnes. In all, 84 poor victims were brought to the surface and hurried away to the Morgue, while the throng outside gazed in horrified stupefaction. . . .

At the Morgue the bodies were laid out for identification in three outer rooms, in hastily constructed coffins of plain boards, while those for whom room could not be found were

placed in a guardroom at the barracks. "These corpses", wrote one who went to inspect that dreadful array, "have a horribly unreal look, and were it not for the intolerable and choking smell of burnt flesh and smoke which rises from them, it would be hard to believe that they were anything but grimly realistic figures in the waxworks of a fair. The clothes, though torn and tumbled, are not burned at all. The faces and hands are of a purple-bronze colour. Blood has dried round the ears and mouths and nostrils, and each face has an open mouth and a swollen look. Many of the hands are torn, and some of the cheeks and foreheads gape with open wounds."

Reading this almost unbearably faithful piece of description, it is not difficult to picture a subterranean fight for life so fearful as to make the struggles related by Madame Justinel, Mons. Martin, and the others who won back to the land of the living appear trivial by comparison. And equally eloquent was the condition of the tunnel and the stations, when the dead had been removed and the atmosphere had cleared sufficiently to make a thorough examination possible. "I ventured with a smoke-begrimed fireman carrying a blazing torch," says one of the investigators, "down the station staircase to the death-trap, half suffocated by the smell of burning wood, tar and india-rubber. The heat was still intense. The station was in absolute darkness, but by the fitful glimmer of the fireman's torch I could see the fatal train, covered with a thick coating of soot, still standing where it had stopped with its doomed freight.

"In the water and blood which flooded the platform, handkerchiefs, belts, hats, veils, a child's hoop, and other articles were lying where they had been abandoned by their owners in the mad rush for life. The windows were smashed to atoms. At one end of the platform was an enamelled wall, the lower part of which, unlike the rest, was free from smoke and dirt. I asked the fireman for an explanation. 'That,' he said, 'is where the people, flying from the smoke, sought for an exit and found themselves up against a dead wall. When we came to clear away the bodies we found seventy-five corpses there.'"

Here, too, is the impression which that silent tableau of horror produced upon another observer, the representative

of *Le Français*: "We proceeded by the light of torches, which cast fantastic shadows upon the calcined walls. It is impossible to imagine a more tragic sight. In this flooded subterranean passage, upon the glistening and slippery pavement, there is an indescribable chaos of hats, umbrellas and articles of dress—here a doll bathed in a pool of blood, there a loaf of bread half covered by a newspaper. On the line the lugubrious forms of the carriages are outlined against the semi-obscurity. . . . The cushions and backs of the seats are torn to pieces. One can imagine the fearful struggle of the unfortunate creatures against the implacable death to which they were bound to succumb. Just at the end of the side opposite the staircase is a formless mass, monstrous and terrible, consisting of débris of all sorts. It is against this wall that the unhappy victims must have crushed each other to death in their panic-stricken efforts to escape. It is stained with blood. The tiles have been torn from the wall, and the cement shows traces of having been scratched by their nails. What terrible moments must have been passed by those unhappy victims in searching for an exit which did not exist ! It defies all conception."

It would be difficult indeed to say where lay the most heartrending evidence of tragedy, when tragedy was everywhere—whether in the gloom of the tunnel or at the Morgue ; in the Police Station in the Rue des Trois Bornes, where pitiful rows of umbrellas, sunshades, hats and other relics waited to be reclaimed, or outside Belleville station, where strong detachments of police and municipal troops held back a dense crowd of working men and women, all frantic for tidings of missing loved ones. In one instance a man pushed his way back through the throng, wringing his hands in despair and exclaiming over and over again, "There's nothing left but to go and look for them at the Morgue !" and he was but one of hundreds.

Innumerable tales of utmost pathos emerge from this calamity. The family which suffered most was one called Didon, which had five victims to mourn—Mons. Didon, who was a commercial traveller, his wife, two daughters, and the wife's sister, Madame Aubertin. Upon this last poor woman was found a return ticket for Edinburgh, where she occupied a post as a teacher of languages. Madame Lecas, of

173, Rue de Bagnolet, a woman employed in a furniture warehouse, left three children motherless, of ages ranging from six to sixteen. Then there was a bronze-worker of the name of Ternois, married only three months previously; he failed to come home that night, and his young wife found him in the Morgue. Equally pathetic was the case of a family called Barratte. The father, a gasman, had three daughters, who lived together in Brittany. The eldest, who had been married just a week before the tragedy, had come to Paris with her sisters to see the old folks. On Monday the three girls, accompanied by the bridegroom, had gone out shopping, and the two younger ones had then taken the fatal train to return home. They now lay side by side in death in a little room of the Rue d'Avron. . .

The funeral of the victims took place on the 13th, and was attended by the Prime Minister, the President of the Municipal Council, the Ministers of War and Commerce, the Prefect of Police, the Military Governor, and a special representative of the President. The sympathetic presence of these high officials, however, was not enough; the populace was burning with resentment, feeling that 84 lives had been needlessly sacrificed as a burnt offering to apathy in high places. The reality of the public sentiment may be gauged by the facts that on the day following the catastrophe the receipts of the "Metro" were practically nil and its shares dropped from Fr. 644 to Fr. 593.

In response to the outcry for immediate and effective remedying of the lamentable state of affairs which had made such an accident possible, a Committee of Inquiry was at once set up, and its recommendations were actually published within 48 hours. The chief suggestions made were that access to stations be provided at both ends of the platforms; that a footpath be provided on either side of the rails; that ventilators be constructed in the tunnels at given intervals; that the rolling stock be made of hard wood, if possible unflammable; that the railings at station-entrances be abolished; that the number of passengers taken into the trains be limited to the number of seats; that motor-carriages be abandoned in favour of separate locomotives; and that the live rail be placed along the roof of the tunnel instead of on the ground.

It will be clear, then, that good came out of evil inasmuch as the authorities were forced, by this tragic occurrence, to take measures which should have been taken at the very outset. The Company attempted to lay the whole blame on the engine-driver, but this the public would not for a moment tolerate. Indeed, the popular attitude received the seal of official approbation when Mons. Combes, the Prime Minister, said in his funeral oration, "It is deeply to be regretted that elementary precautions were not taken from the beginning."

LONDON'S SECOND BIGGEST BLAZE

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Most English folk have at some time or other heard vague mention of "The great Tooley Street fire", but there are probably few nowadays who realise what a truly fearful conflagration it was—certainly the most spectacular since the Great Fire of 1666. It should be of particular interest to us, too, by reason of the revolutionary changes it brought to pass in the organisation of London's fire-fighting resources. There existed, prior to 1861, the year of the Tooley Street affair, three separate organisations to combat outbreaks of fire. They were, firstly, the one fire-engine which every parish was bound to support under the Metropolitan Building Act ; secondly, the London Fire Brigade, which was maintained by the insurance companies ; and thirdly, the Fire Escape Etcetera Association, a body supported entirely by voluntary contributions.

The fact of the London Fire Brigade being a private organisation kept by the insurance companies was specially unsatisfactory, and that for two reasons. In the first place, the equipment and personnel maintained were very naturally no larger than seemed likely to be required in order to cope with fires in insured property. And secondly, it meant that the public at large had no call, as of right, upon the services of the Brigade. True, the latter was permitted to attend fires in uninsured buildings, but it did so merely as a favour, never as a matter of duty. The state of affairs, in fact, was such that in certain conceivable circumstances it might have given rise to an almost Gilbertian situation. Supposing, for example, that Buckingham Palace had chanced to catch fire simultaneously with some piece of insured property : where then would the Brigade's duty have lain ? However, this is merely of academic interest ; what is of importance for our purpose is that when all the resources of the London

Fire Brigade had been drawn upon to combat the Tooley Street conflagration, the result was a hopelessly inadequate total of 17 *engines*! And it was this startling revelation which gave rise to the first suggestions that it was high time for the ownership of the Brigade to be made a matter of public policy rather than one for private business interests.

The locality of the blaze under discussion had for a quarter of a century been a notoriously unlucky one in regard to conflagrations, for some of the most destructive fires experienced in England during that period had taken place there. Notwithstanding this evil reputation, however, the warehouses abutting on Tooley Street in 1861 were probably the finest and best-built edifices of the kind in the kingdom. The area comprised an extensive range of premises near London Bridge, stretching along the south bank of the Thames from close behind St. Olave's Church to the warehouses flanking the then new dock beside Hay's Wharf, and included, in addition to the last-named, Chamberlain's Wharf, Cotton's Wharf and the Dépôt Wharf. The entire space of Cotton's Wharf on the land side, extending from the riverside to Tooley Street, was covered with some eight or nine great warehouses six storeys in height, some of which had formerly seen service as Ordnance stores, and the central block of which consisted of the bonded warehouses belonging to Messrs. Scovell. This area would amount to approximately three acres, while Chamberlain's Wharf contained another four warehouses and Hay's Wharf held those of Alderman Humphrey. The buildings were literally crammed with valuable merchandise of every description. Stored in the upper floors were many thousands of chests of tea and bales of silk; the lower contained immense stocks of Russian tallow and tar, oils, bales of cotton, hops and grain. The value of the goods would be, at a conservative estimate, something a little over half a million sterling.

Scovell's central building had only recently been erected, and its construction had given rise to some dispute between the firm and their insurance company which had been settled a bare few days before the fire. This difference seems remarkable in view of the fact that probably no range of premises ever built up to that date had been equipped with

so many precautions for the extinction of fire as were these. In a cellar beneath the depôt was a powerful force-pump supplied with water from the Thames, and to this were fitted iron pipes leading to various parts of the establishment.

On Saturday, June 22, 1861, the bonded warehouses were locked up at 4 p.m., as was the usual custom, but in the other buildings the men were kept at work until 6 or 7 o'clock. The cause of the fire was never definitely ascertained, but the likeliest explanation seems to be that it was due to spontaneous combustion among the hemp. Whatever the origin, it was just when the business of the day was about to be closed—soon after 4.30 p.m., that is to say—that an alarm was raised in Scovells' central warehouse of smoke issuing from the jute and hemp stored on the first floor. A number of the workmen at once attacked the danger-spot with the apparatus noted above, supplemented by water in buckets, but very soon the heat and the density of the smoke compelled them to beat a hasty retreat. One man, by crawling over the merchandise on his hands and knees, succeeded in obtaining a view of the actual seat of the fire. He reported that it was at this stage confined to quite a small area—so small, indeed, that had it not been for the stifling smoke he could have suppressed it unaided. However, it was not suppressed, and on the arrival of some fire-engines from the Brigade's headquarters in Watling Street, not only was smoke issuing in dense clouds from the loopholedoors of this particular warehouse, but it was observed to be pouring out of the windows of the adjoining buildings as well. This at first occasioned considerable surprise, since it was known that strong party-walls divided the warehouses; but it was afterwards explained by Mr. Scovell that on the first floor the double iron doors in the party-walls had been left open on account of the men being still at work there.

No flames were yet visible, but the smoke was momentarily becoming denser and denser, and any approach close to the nucleus of the trouble was quite out of the question; Mr. James Braidwood, the Director of the London Fire Brigade, had no hesitation in predicting a conflagration of great magnitude. However, like the man of action he was, he lost no time in stationing his force in the best available

positions to hold the fire in check. Two floating engines had arrived on the scene, one from St. Katharine's Docks, the other from H.M. Dockyards at Deptford, and these Braidwood placed off the wharf, with two lengths of hose affixed to each, which were led on to the quay and brought to bear on both sides of the burning building. Simultaneously, all ships lying at the wharf—or rather, as many of them as were not aground—were hauled out into the stream. The land fire-engines present at this stage were those of the parish, those of the Lambeth Distillery, and one belonging to Mr. Roberts, of Millwall. These took up positions in Tooley Street, but it was stated afterwards, with no little indignation, that they were forced to stand idle for quite an hour before water was obtainable from the plugs, and it was also said that the water-supply had been similarly short at nearly every large fire which had occurred in this locality during recent years. Mr. Frederick Hodges, of the Lambeth Distillery, declared in a letter to *The Times* that the supply from the Southwark and Vauxhall Waterworks Company's plug had been totally inadequate; so much so, in fact, that the crews of his engines had been compelled to get their water from the South-Eastern Railway Company's locomotive cistern. It is only fair to add, however, that the Secretary of the Waterworks Company wrote an equally emphatic letter in reply, in which he stated that throughout the duration of the fire seven plugs had been in incessant flow.

It was shortly before 6 p.m. that flames at last became visible, but when they did it was to burst forth with truly awful fury. Within an almost incredibly short span of time the entire main building from basement to roof became one roaring mass of fire. And the flames travelled with terrible rapidity in either direction: simultaneously they reached out for the line of warehouses facing the river and for the lofty buildings adjoining on the Tooley Street side. But it is on record that even at this alarming juncture Braidwood lost none of his habitual sang-froid, but moved quietly from point to point stationing his men wherever they seemed likely to be able to do the best service. Appointed Superintendent of the London Fire Brigade on its establishment in 1833, he had speedily won for himself a high reputation,

and was in constant demand as a consultant upon all matters relating to the safety of public buildings. But in addition to this practical side of his life, he was a member of numerous scientific institutions, and was known, too, as a prominent figure on the various educational and charitable committees which existed in connection with the church he attended.

By about 7.30 p.m. the warehouse in which the fire had commenced was gutted ; but the flames, far from abating, soared up to a greater height now than ever, for they had reached the enormous stock of tallow stored in the lower floors, and it appeared as though contact with the water which the firemen kept pouring upon the blaze had only the effect of making it rage more furiously still. In the adjacent buildings also were large quantities of tallow and oil ; as warehouse after warehouse became ignited, these substances ran down through the loopholes in a steady stream and poured into the vaults beneath. At intervals loud reports were heard, but at the time these excited no particular alarm, since the foreman of the wharf, though he admitted that in another part of the area there was a large stock of saltpetre, emphatically assured the firemen that the warehouses now on fire contained no explosive material whatsoever.

The police had by this time got control of all the thoroughfares leading to the wharf, and were permitting no unauthorized persons to approach, so that the firemen were able now to go about their duties unhampered. At half past seven or so Braidwood, who had already paid several visits to four of his subordinates who were working the branches from the floating engines, entered the gateway leading to the wharf nearest St. Olave's Church and, accompanied by a Mr. Peter Scott, proceeded down the avenue where these men were engaged. Presently he was busy handing out tots of brandy, one of which he had just given to Henderson, the Brigade foreman, telling him to keep aside in the fresh air for a bit, when, sudden as a thunderclap, came overwhelming disaster.

While the little group of men were enjoying their well-earned refreshment, there came from a section of the warehouses known as "G Block" a loud crash. About the exact nature of this noise there was afterwards some dispute.

Many of those who heard it were certain that it had been the report of an explosion, and claimed in support of their belief that a large stretch of wall had been blown into minute fragments. On the other hand, both J. G. Doyle, Scovells' wharf-superintendent, and William Metcalf, of the London Fire Brigade, were no less convinced that the roar was caused purely and simply by the collapse of floorings. Be that as it may, Doyle shouted out a warning to some twenty people who were close to the block from which the noise issued, and had just turned to make his own escape, when there arose a loud cry of, "*The wall is coming!*" and simultaneously a mass of masonry some 84 feet long by 40 feet deep came falling outwards, right into the avenue. A Mr. E. R. Cutler, principal clerk in the town department of the Westminster Fire Office, was standing close beside Braidwood. Of the ensuing moments he had afterwards only the dimmest recollections, but he remembered bits of brick striking him on the arms and shoulders as he rushed for safety. Henderson was also close beside Braidwood. Seeing that appalling vision of the warehouse-frontage toppling down on them, he just had time to yell a warning, then bolted for the front gateway, while his men ran in the opposite direction on to the wharf, where they jumped into the river. Poor Braidwood attempted to follow him, but before he had gone many yards he was struck down by the top portion of the falling wall and buried beneath tons of rubble. Death must have been instantaneous. His men came running back to try and extricate him, but the task was beyond hope, and in any case a sound as of a further explosion compelled them to fly again almost immediately. Their brave Director had to be left lying somewhere under the vast mound of débris, and of Scott, too, there was no sign.

Soon after Braidwood's death the conflagration assumed a most frightful ascendancy. The flames soared to heaven in an unbroken sheet, the Thames bore the aspect of a river of bloodstained gold, and the rows of windows in the buildings on the north side of the stream reflected the glare till they seemed on fire themselves. From the explosions which followed one another now in almost uninterrupted succession it became the general impression that there must

have been a heavy stock of saltpetre in every one of the warehouses. The concussions shook the whole neighbourhood and scattered vast clouds of flaming fragments over the panic-stricken district.

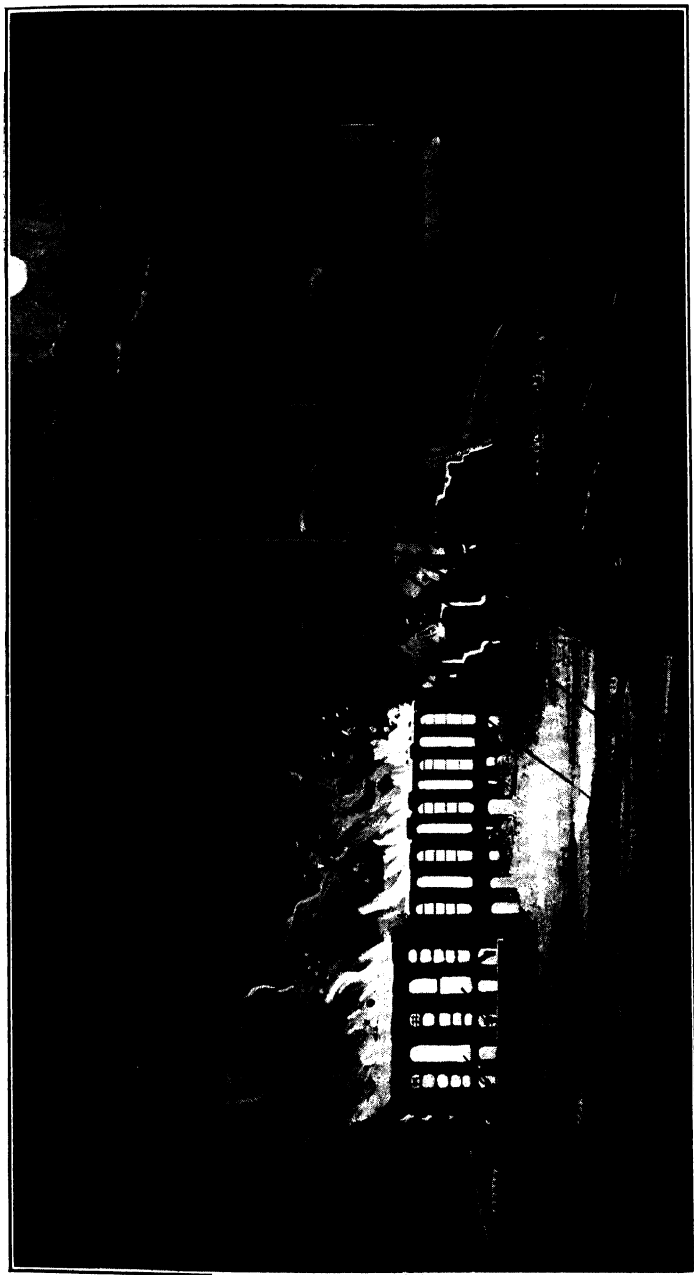
All through that night the public-houses, defying the law, kept open to minister to the wants of the immense crowds which the spectacle had drawn from near and far, and the pickpockets, too, did a roaring trade. Never since the middle of the seventeenth century had Londoners enjoyed the opportunity of witnessing such a bonfire. Even in the early evening, though the sun had not yet set and the upper sky was bright and clear, all the public buildings in the city and along the waterside were tinged with a hellish glare, while across the Pool of London and the whole East End swept the huge, dark smoke-clouds. The news by this time had spread to every corner of the metropolis, and the great concourse of people made London Bridge and the Borough impassable. The balustrades and outside coping of the Bridge were fringed with thousands of spectators, some of whom missed their footing and fell into the river, at least one life being lost in this fashion. "Never since the *Great Eastern* left the Thames," we are told by an eyewitness, "were so many small boats out. The stream was covered with them. All the roofs of houses, the public buildings, the masts and spars of vessels, the quays and wharves, the tops of church steeples, even the gallery of the Monument, were crowded with thousands of spectators. It was one of the most wonderful and terrible spectacles ever witnessed in England. . . . The boats were all obliged to keep close to the Middlesex shore. This was partly because of the heat, but also because, as warehouse after warehouse caught fire, barrels of saltpetre and tar exploded and came pouring forth in streams of liquid fire, which floated out on the water in great sheets and broke up at last into little islands of flame, which went drifting up the river. The Thames Police beat and scattered these out as they floated through London Bridge. Luckily the main mass of this liquid fire gathered round the fragments of hulls of ships burnt earlier in the evening. . . . It seemed as though nothing could stop the fire. There were great warehouses which were called 'fireproof', but these visibly got red-hot, like

shells of furnaces, till their contents poured out through doors and windows in great streams of flame. . . . About 10 p.m. the fire was at its worst. Probably the greatest body of flame was between 8 and 9 p.m., but then the broad light of a summer's day drowned the glare. . . . The whole south bank of the river, from London Bridge to the Custom House, seemed one stupendous pile of fire, glowing at its core with an intensity that made it painful to look at, and casting a ruddy glare above on everything far and near."

All London's fire-engines, and all that could be brought to the scene from the suburbs by rail or by road, were now in full operation, yet the firemen might just as well have been armed with toy squirts for all the effect they were able to produce. All that could be done was to sprinkle the outer fringe of the conflagration ; so intense was the heat from that vast incandescent mass that none might approach near and live. The firemen's sole hope lay in the night continuing calm, and by the mercy of heaven it did. Had any serious wind arisen, the blasts of heated air coming through such a pile of fire must inevitably have ignited everything within half a mile.

At one time, indeed, there arose a situation of breathless anxiety, for a breeze suddenly began to blow from the river, which turned the flames in the direction of London Bridge Railway Station. Between the station and the fire lay a big timber-yard with a block of houses projecting into the midst of it. Once let the fire catch those houses, it seemed as though no mortal power could save the timber-yard and the station. On the houses, therefore, the firemen concentrated all their efforts. In vain, however, for labour how they would the flames gained steadily, and presently a sheet of fire was pouring out of them. Their roofs collapsed in a terrible cloud of sparks. The station now seemed doomed ; all the firemen could do further was to keep up a steady flow of water on the timber-yard. But just as all seemed lost, the breeze gradually veered back in the direction of the river. London Bridge Station was saved after all. . . .

At 11 o'clock the picture was one almost to defy description. "Spreading far and wide," we are told, "amid



LONDON'S SECOND BIGGEST BLAZE
"The conflagration assumed a frightful ascendancy."

gaunt ruins of walls, cracked and riven out of shape, lies a perfect sea of fire nearly as white as snow, from which the red flames spring in massive leaps and scatter, like explosions, myriads of charred embers high into the air. Now a puff of wind will act on the ruins far and wide, like a blast through a furnace, and they spring into a whiteness to which the glare of sunlight is mere darkness. While these gleams last the spectacle is tremendous. On every side are only great vistas of rugged walls and white, gleaming streets, the very pavements of which give off a livid glare that is blinding to look at. The walls, still standing, but white with heat and cracked in all directions, seem like pillars of fire, against which, as the breeze drops, the flames rise again, and, licking up their sides, seem to flap against them and bring the glowing bricks down in long streams. . . . Nothing can be seen but a town of falling ruins, with great rafters swaying about in fiery tangles before they fall headlong down—nothing heard but the roar of flames and shouts of excited thousands, which drown even the incessant dull thumpings of the engines."

Then, a little after midnight, when the fire had devoured its way right through to Tooley Street, "a huge granary lower down the river, supposed to be fireproof, became apparently red-hot, and the flames could be seen whirling round and round through the storeys till at last they found a vent through the roof, and, belching upwards for a few minutes in one great pyramid of sparks and fire, left only the hollow, glowing walls standing". It would be at approximately this time, too, that an immense line of wall facing the river—actually this was part of the shell of the building in which the fire had first begun—fell outwards with a hideous uproar. The scene it disclosed was nothing short of appalling, a veritable glimpse of hell fire, and the sudden glow of heat could be felt far out on the river.

The flames were at this period still continuing to spread, not only down the river, but backwards through Tooley Street in the direction of Bermondsey and the railway. Mercifully, however, the slight alteration in the direction of the breeze, already noted, held, so that the great mass of sparks and heated air was kept out over the river. But

for this providential circumstance, half of Bermondsey must inevitably have been laid in ashes. As the night wore on, more and more fire-engines came hurrying to the scene from distant parts of the country. But still they could not reach the glowing core of the conflagration, nor, indeed, come anywhere even approaching it, and so the great pyrotechnic display continued without the least sign of abatement.

It has been mentioned above that the Thames was thick with small boats. It now needs to be added, however, that by no means all of the occupants of these craft were there merely as sightseers. Hundreds of them had gone out for the specific purpose of collecting as much as possible of the molten tallow which floated on the river and could be scooped up by the boatload as far down as Millwall, and a good many lives were lost in the process. One police inspector alone reported having witnessed five such accidents. A case in point was that of four young men who were observed from the landing-stage beyond Humphrey's Dock and in front of the eastern portion of Hay's Wharves. They had almost collected a boatful of grease when suddenly a great flood of the boiling fat, all aflame, came rushing down on them from one of the burning wharves. In an instant the boat was surrounded by fire and the tallow in it set alight. The unfortunate youths plunged overboard into the river, but none of them was ever seen again.

At another point a boat came drifting along in the midst of a clear, bright flame. The wretched man in it was shouting for help, but the coxswain of a Thames Police boat near by refused to go to his assistance, saying there was nothing he could do. At this juncture, however, there came on the scene two Rotherhithe men called Larkin and Maxwell, in a boat filled with rubbish they had been gathering. With unruffled coolness they picked their way between the islets of flaming tallow, then made a dash for the despairing man and dragged him safely into their boat.

Alongside Chamberlain's Wharf, too, an incident full of drama was enacted. At this point there was moored a small sloop, which took fire and was soon burning from stern to stern. Just when this minor conflagration was at its height, along came a barge with full flowing sails, borne

on the rising tide. A treacherous eddy carried it too close to the flaming sloop, the three men on board lost control. Just when it seemed as though they must unavoidably perish, however, a boat pulled out from the shore and took them off. As they scrambled to safety a tremendous cheer burst from the thousands of spectators. It had been a close thing, for in less than two minutes the barge was blazing from end to end.

Later in the night a small boat rowed by one man was in similar fashion drawn towards the vortex of flame, and again a rescue was effected by another boat. But a second man who found himself in the same dire straits was drawn too far to be thus rescued : boat and man vanished into the flames and were seen no more. . . .

St. Olave's Church was saved from the jaws of the voracious fire-demon by the fortunate presence of a vacant plot of ground, beyond which it could advance no farther in a westerly direction. On the eastern side of the fire area it looked for some time as though the "fireproof" buildings on Hay's Wharf might escape, but at last they caught alight in the roof. However, their fireproofness was at least sufficient to cause the flames to travel downward only at a comparatively slow pace, so that there was time enough to get the merchandise out of the lower floors. Now that Hay's Wharf was included in the holocaust, the frontage of fire cannot have been less than 300 yards wide, with a deep foreground of blazing oil and tallow. And the higher the tide rose, the wider became the great curtain of flame, as cask after cask of tallow melted and gushed forth into the Thames in the form of liquid fire.

The ships lying alongside Hay's Wharf in the inlet known as Humphrey's Dock were now in imminent peril, for any moment the fire might burst out of the warehouse walls and lick across the dock. By a little after midnight, however, the tide had risen sufficiently for the vessels to be floated out. The first to be towed forth to safety was a screw steamer, and loud cheers greeted the feat. There remained an American barque, upon which a floating engine had been playing for hours past. Despite the constant stream of water, ominous little blue blisters had kept making their appearance on the cordage of the topgallant-mast, and once the rigging

at that point had fairly burst into a blaze. Now, however, this vessel was towed out in the steamer's wake—and just in the nick of time, for even as she cleared the dock the iron shutters fell out of the warehouse walls and tongues of flame sprang greedily across the very berth she had occupied.

Dawn found London Bridge still crammed with cabs, buses, carts, wagons, and every other conceivable form of vehicle. For the onlookers had had no thought of departing while there was still this fine free spectacle to watch, and the vendors of light refreshment had sold out many times over. The fire, though still raging with unabated fury, was by this time hemmed in, for there was an impassable gap at either end and the engines stationed in Tooley Street had effectually prevented it from ravaging any farther in a southerly direction. But there seemed every chance that the conflagration would, within these limits, go on blazing for days, for of combustible material there were still supplies galore. Beneath the fallen floors of the warehouses and in the cellars lay thousands upon thousands of casks of tallow, not to mention an indefinite quantity of saltpetre, oil and turpentine, and hundreds of tons of cheese, butter, sugar and bacon.

All through Sunday vast throngs of people flocked to view the ruins, though the walls were in so precarious a state that not even the firemen and police were permitted to approach them. At midnight the area was still blazing as vigorously as ever, and it looked as though at any moment the flames might suddenly make another terrific attack on the surrounding neighbourhood. Of all the fine, massive property which had stood behind that vanished line of wharves not a vestige was left now but the bare walls and an immense chasm of fire, fed constantly from the limitless stock of combustibles in the basements—the fire which late on the Sunday night still lit up the Pool and the East End with a lurid glare. At 1 a.m. "blows" of saltpetre yet continued to go off without cessation. How far the fire extended underground was impossible to conjecture; there were vaults which ran under the streets as far as London Bridge Station, and in these were stored not less than 15,000 casks of tallow.

On Monday, the 24th, the devastated area was surrounded by a cordon of more than 200 police under Superintendent Bradford. None was allowed to pass save actual owners of property on the spot, for otherwise there must unavoidably have been a dismal tale of mishaps. And of casualties there had already been enough and to spare. Apart from the deaths of Braidwood, Scott and those of the as yet uncounted individuals who had perished in the floating fires on the river, an Irishman named Sullivan had had his neck broken through getting entangled with a chain of one of the floating engines, and at St. Thomas's Hospital lay four men—Police Constable John May, George Fraser, John Deane and Thomas Masson—all suffering from very severe burns.

It was at 3 a.m. on this Monday that the firemen, by carefully removing the rubble brick by brick, succeeded at last in extricating poor Braidwood's body, which they found so terribly crushed as to be barely recognisable. Of Scott's remains there had as yet been discovered no trace; in point of fact, it was not until July 5th that some men engaged in sifting rubbish found in the sieve some charred bits of a human jaw, skull and thigh-bone.

"Nothing is to be seen," wrote a visitor to the place on the Monday afternoon, "save lofty sheets of wall burnt white as lime . . . and leaning about in every angle, as if shaken by an earthquake. . . . Where Braidwood and Scott were killed, a whole warehouse seems to have been mined at its foundation. It beetles over the spot at a fearful angle, and beneath it is a cellar 100 feet long by 50 feet wide full of oil, which is on fire from end to end." Several times during the day water which percolated through to the vast but confined heat-centres generated explosions of steam which all but shook down the tottering superstructures. Indeed, most of the warehouse walls above this spot—in the London Bridge direction, that is to say—had by now collapsed, though those on the other side, towards Horsleydown, were still precariously standing. As one passed down from Tooley Street, all the roads and footpaths were ankle-deep in foul-smelling, perilously slippery melted tallow.

At about 8 o'clock on the Monday night the fire suddenly

belched forth with fresh violence. "The flames then rose high into the air in all sorts of colours. First came a brilliant vermilion hue which seemed to top the pinnacles of the Tower of London with red. Then the fire changed to a bright hue, and at the same time immense volumes of white and black smoke rolled over the housetops, presenting a most fearful but picturesque effect. The River Thames below bridge was like an immense stream of burnished gold."

One circumstance there was which seemed more astonishing with every hour that passed, namely, the preservation of the eastern range of Hay's Wharves, beyond the dock. The cellars beneath the burnt portion were stored entirely with barrels of linseed, sperm and olive oil, and it was obvious that the ignition of a single barrel could not fail to involve the destruction of the whole, not to mention a neighbouring warehouse filled from top to bottom with spirits of turpentine. The immunity of these highly inflammable stores was generally attributed to the heroic action of Mr. Hedges, of the Lambeth Distillery, who, disregarding the risk he ran, led the hose of a fire-engine to a place where the fire was just beginning to take hold of the east wing. So imminent was the peril of the flames crossing the dock that the firemen actually dropped an engine over the edge of the dock-bridge in their haste to remove it to safety.

The oils in the vaults beneath Hay's Wharf were worth some £30,000, and accordingly no little satisfaction was felt at the prospect of saving them—a prospect which seemed more and more likely of fulfilment as the ruins above steadily grew cooler. But, alas, on Wednesday, the 26th, smoke was observed to be issuing from the vaults, and it was then discovered that they were on fire from end to end.

All things are bound to have an end eventually, however, and *after nearly a month* the great Tooley Street fire at last burnt itself out, having perpetrated damage amounting to approximately £2,000,000. Let us conclude with an eyewitness's description of a few curiosities of the conflagration he observed when traversing the area after it was all over : "Beneath some warehouses the charred rice lies in piles like coke, except that the individual formation of each grain

is perfectly represented by the charred cinder. . . . One lower floor was stored with a large quantity of raw hides. . . . The very best of them, which from outward appearance seem to have escaped altogether, may be torn between the finger and thumb with as much ease as sheets of paper."

THE GREAT KINGSTON EARTHQUAKE

THE GREAT KINGSTON EARTHQUAKE

ABOUT the circumstances attendant upon seismic convulsions there is generally a certain sameness. Inevitably there is the wild panic following the initial shocks ; then, in an almost monotonous regularity of sequence, come the outbreak of fire, the paralysis of the fire-brigade owing to burst water-mains, the attempts at looting and the consequent declaration of martial law, the hurried measures to provide shelter for the homeless and food for the starving, the exodus of the population, the world's ever-generous response to the call for assistance, and, finally, with the return of man's inherent courage, the first steps towards reconstruction. All these familiar features were present in the terrible earthquake which smote Kingston, the capital of Jamaica, on the afternoon of January 14th, 1907, following hard on the heels of the destruction of San Francisco and of Valparaiso—this third upheaval on the grand scale in less than 12 months surely constituting a record in the world's history since man first commenced to build cities. Yet there were circumstances in connection with the Kingston catastrophe which lent it a unique distinction, not least of which was the highly unfortunate "incident" which, had the Governments involved failed to keep their sense of proportion, might easily have led to much international unpleasantness.

Jamaica's record has been scarcely a happy one. In 1692 occurred an earthquake which cost 3,000 lives and submerged the greater part of Port Royal, the old capital. Then, 11 years later, whatever of Port Royal remained above water was completely demolished in a great fire, freeing from the last traces of commercial competition the new capital, Kingston, which the survivors of the earthquake had in the meantime founded. But in 1780 Kingston itself was ravaged by a conflagration which raged for two days and

a night, inflicting £200,000 worth of damage. It was again partially destroyed by fire in 1843, again in 1862, and yet a third time in 1882, when 557 houses were consumed, rendering 6,000 people homeless, and damage done to the extent of £150,000. Four years after this came a frightful cyclone which destroyed the banana crop; it was followed in 1899 by another very destructive hurricane, and after a further four years' interval the banana plantations were yet again laid waste by storm.

Grim though Jamaica's general record was, however, 215 years had now elapsed since the last serious earthquake, and although on calm days the battered remnants of old Port Royal on the sea bottom could still be discerned through the water, the Jamaicans had gradually come almost to forget that they lived in an earthquake zone. Had they but kept that fact in mind and rested content with wooden buildings, instead of launching out ambitiously in stone and brick, it is possible, even probable, that the visitation which forms the subject of this chapter would have entailed little or no loss of life. But about Kingston there was no such simplicity, and if further proof were needed of the false sense of security into which the inhabitants had suffered themselves to be lulled by their long immunity, it might be found in the fact that there was little of the insurance of the city that did not specifically exempt earthquake risks. Actually, a month or two before the disaster a London firm of insurance brokers had offered to arrange cover for Kingston against all earthquake damage, including resultant fire, but the offer had been declined on the grounds that "material damage from this cause was practically unknown". To sum up, the minds of the Jamaican business community were occupied, to the exclusion of every other consideration, by a glad belief that at last, after their long train of misfortunes, they stood on the threshold of a new era of unprecedented prosperity.

Kingston had, in 1907, a population of nearly 50,000, while about 20,000 tourists passed through annually in the course of the winter months. Something over 1,000 acres in extent, it sloped down to the sea on the northern side of a landlocked harbour, and was neatly laid out with its streets running at right angles to one another, either

north and south or east and west, and paved with brick, macadam or asphalt, the principal thoroughfares being traversed by electric cars. The city boasted many large and important buildings, including five mission-stations and five churches, one of which contained the tomb of "Old Benbow"; it was justly proud of its "King's House", its Supreme Court, its banks, its colleges, its fine commercial houses and its public gardens. Yet Kingston, like all cities, had its squalor as well as its splendour. "Prior to the earthquake," wrote a keen observer, "it had clotted masses of tropical slums that fully accounted for the existence of a considerable amount of preventible disease, and that were not fit for human habitation. The wretched shanties tenanted by negroes of the poorest class were in the most dilapidated state, and looked as if they might topple over at any moment without the assistance of an earthquake. They were, moreover, unsavoury and filthy to an indescribable degree."

Monday, January 14th, 1907, saw Kingston *en fête* for the opening of an important agricultural conference, to attend which visitors had come from near and far. On the previous Friday had arrived the s.s. *Port Kingston*, bringing Sir Alfred Jones, President of the Liverpool School of Tropical Medicine, and a large party of members of the British Cotton-Growing Association, which included Lord and Lady Dudley, Mr. Arnold-Foster, M.P., Mr. A. A. Pearson, of the Colonial Office, Sir Thomas Hughes, of Liverpool, Sir Thomas Shann, of Manchester, Mr. W. Ralph Hall Caine, brother of the famous novelist, Mr. Jesse Collings, M.P., Lord Mountmorres and Mr. Henniker Heaton, M.P. Another extremely distinguished visitor was Sir James Fergusson, Deputy-Chairman of the Royal Mail Steam Packet Company and a former Postmaster-General, who had served his Sovereign in most quarters of the globe—as soldier on Crimean battlefields, as a Governor in Australia, New Zealand and Bombay, and as a Member of Parliament and Minister at home. Between this veteran's first election as M.P. for Ayrshire and his final retirement from Parliament had elapsed no less than 59 years, yet he still took a keen and active interest in public affairs, as witnessed his presence now in connection with this Jamaican conference.

The opening meeting was held on the morning of the 14th in the Board School, Hanover Street, after which the delegates dispersed in high good spirits, the Governor, Sir Alexander Swettenham, taking off some ten of them for lunch at the Jamaica Club, after which some of them re-assembled in the conference hall while others elected to take a look round the city. In the early afternoon there arose abruptly a violent wind-storm, accompanied by partial darkness. This served as some sort of warning to such of the whites as knew how to interpret it, and most of them at once took the sensible course of making their way into the open. The negroes, on the contrary, sought shelter in the poorer quarters, and here undoubtedly we have the chief reason why the coloured folk provided the vast bulk of the death-roll in the ensuing calamity.

At about 3.30, almost immediately in the wake of the gale, came the first tremendous earthquake shock, a sustained oscillation of four to five minutes' duration, not in any particular direction, but mainly up and down, and followed by two others at intervals of 15 seconds, which levelled the lower part of the city on the waterfront. "The first shock," we are told by a descriptive writer, "was like a quivering blow, as if a giant's fist had smashed against the underside of the earth's crust. Objects leaped into the air and people were hurled to the ground." And here is the vivid account given by one of those present at the conference, where the earthquake interrupted the reading of a paper on "Seedling Canes" by Mr. Bovell: "The sound of it had a personal and vindictive quality in it. The image, not of subsequent reflection, but of the moment, was that of some savage animal which had grasped the earth in its jaws and was shaking it to and fro with a noise half growl and half roar. The din continued, the walls shook and rattled; objects fell from the walls and ceiling. The Chairman, chair and all were overthrown upon the platform." Happily, however, the members of the audience were all able to make their escape from the hall.

In some places the tremor was felt as a rolling motion, the earth appearing to rise and fall in waves; elsewhere it was simply a heavy shaking from side to side. As always happens, the streets were filled immediately by droves of

demented people pushing aimlessly in all directions, and, as always happens too, the poor senseless creatures were stricken to earth wholesale by masses of brickwork that came crashing down upon them as the buildings swayed and toppled over. In Harbour Street, and in many other places, the walls fell outwards and straight across the streets, and from this cause the mercantile community suffered particularly severely, numbers of people being overwhelmed in the downfall of their warehouses before they had a chance to run far enough to escape from beneath the cascading masonry. Most of the light-framed buildings of the poorer districts, too, collapsed like houses of cards at the impact of the first shock, and hundreds of unfortunate folk were trapped in the falling timbers, where many met a miserable end in the flames which instantly sprang up among the débris on the water-front.

Let Mr. Henniker Heaton, who had been one of the Governor's luncheon-party, tell us of his experiences. "After lunch," he says, "I left the Club and went with the Hon. Mr. Cork, a member of the Council and a leading planter, to visit the Post Office, and was returning from there when the earthquake took place. The street was a moderate-sized one, and the moment the ground began to quake thousands of people rushed and jumped into the street from the houses. A huge building fell across the street a yard before us, and another building blocked the street behind us. On our left a third building fell into the street. Then followed absolute darkness. Great clouds of dust, mortar and débris filled the air for five minutes, and when the light was restored my companion and I found ourselves black with dust and dirt like negroes. It was a miraculous escape.

"The scene that followed baffles description. Women were embracing their little children. Others were on their knees praying loudly and with the most intense feeling to God with such words as, 'Lord, have mercy on us!' 'God, have mercy on us!' 'Christ, have mercy on us!' Others were fainting, and others running wildly looking for their loved ones. We climbed over the fallen loads of bricks and mortar and we got back to the Club. It was in ruins, with the roof collapsed, and the room where we had been dining was filled with tons of brick from the fallen walls,

"A young fellow, hatless and coatless, and with a handkerchief round his head, addressed me in the street outside the Club for several minutes. At length something peculiar struck me, and I asked if he was Gerald Loder, my friend for many years in the House of Commons and an ex-M.P. for Brighton. He said, 'Yes.' He was writing in the reading-room on the second floor of the Club when the roof fell in. He had been pinned to the floor by the roof, but by freeing himself from his coat he escaped on to the parapet and descended by a ladder into the street.

"The most awful sight was poor Mr. Bradley, a member of the Club, lying dead under the great fallen pillars of the building. At Constant Spring Hotel I found my bedroom shattered and the roof cleared off it. I found numbers of ladies, who had been taking afternoon rest in their rooms, on the lawn with blankets and bed-things around them. That night we slept on the lawn of the hotel, and during the long hours between sunset and sunrise we felt at least three earthquake shocks. The blaze of the raging fire over the city was plainly visible."

The Bradley whom the narrator saw lying crushed to death in the Club was Mr. R. W. Bradley, a well-known sugar-planter. At Constant Spring Hotel, to which he also refers, an establishment situated some six miles out of Kingston, there were, happily, no deaths. His account of the material devastation wrought there, however, is well substantiated by the story told by Mr. Ebenezer Carr, who at the moment of the earthquake was sitting in the shade of a cluster of bamboos in front of the hotel. "Quite suddenly," he writes, "a strong breeze arose, immediately followed at about 3.25 p.m. by a rumbling noise, as of underground thunder. . . . I at once sprang to my feet. By this time the motion of the earth was so great that I had some difficulty in preserving my equilibrium. I distinctly heard the fearful sound coming nearer, passing from under my feet, and dying away in the direction of Kingston. . . . I stood facing the hotel, and saw the entire building violently rocking from west to east, and at the same time two wide rents of considerable length appeared in the west tower, which is built of stone, and which, to my great surprise, did not fall. . . . A feeling of fear came over me



KINGSTON EARTHQUAKE

"The streets were filled immediately by droves of demented people."

that the earth would open and swallow up the hotel with all its occupants. . . . A scene of terror and distress followed. All the visitors and servants fled from the hotel, the native black women exhibiting the greatest fear, raising their arms and shrieking in wild excitement."

The Myrtle Bank Hotel, too, was destroyed, likewise the Cable Office, the gas and electric works, the Supreme Court, the City Council Chamber, the Colonial Bank and Savings Bank, the Parish Church, St. George's Church, the Roman Catholic Church, the Masonic Temple, the Training College, the Hope College, the Customs buildings, and every newspaper office except that of the *Daily Telegraph*. General Marshall's residence was totally demolished, and King's House, the residence of the Governor, badly injured. A portion of Port Royal sank under water and two men were drowned, while a sapper was engulfed through the subsidence of the batteries to a depth of eight feet. The prison was destroyed, though no prisoners either suffered injury or escaped and the lunatic asylum also was thrown down, but in this case hundreds of the inmates gained their liberty. The destruction of the Colonial Bank merits particular mention for the fact that the entire staff stood by with the fire sweeping down on them, and not a man deserted his post until all the books and papers were saved.

All earthquakes produce their freaks. In the 1692 convulsion a Protestant refugee named Lewis Galdy had been swallowed by the earth, then thrown out to sea by a second shock, and had managed to swim until rescued, after which he lived to see 80. In this earthquake a statue of Queen Victoria, though left absolutely intact, was completely reversed ; formerly it had had its back to the Parade, but now faced it.

One of the places where the greatest loss of life occurred was the Machado cigar-factory, in which a large number of Cubans were employed. The building crumbled to earth and buried 120 unfortunate workmen beneath its ruins. Another scene of painful tragedy was enacted at the Camp of the West Indian Regiment, where the whole barracks fell flat and the military hospital caught fire immediately after its collapse. Major W. H. Hardyman

received fatal injuries, and others killed were Quartermaster-Sergeant Sykes, Company Sergeant Major Sugden and his wife, Sapper Warburton, the wives of Quartermaster-Sergeant Gane and Prison Warder Sergeant J. Venesse, and a daughter of Staff-Sergeant Grant. Among those seriously injured were Lieutenant H. C. Sidgwick, Sergeant Sharpe, the wife of Foreman of Works Staff-Sergeant C. A. Ireland, and a child belonging to Company Sergeant Major R. T. Levitt.

The débris of Kingston burned like tinder, and the firemen were helpless to check the conflagration, for a strong wind was blowing and the water-mains were burst. Before the flames were at last brought under control, which was late on the Monday night, they had consumed a triangular area between Parade Gardens, the sea, Duke Street and Princess Street, the Parish Church forming the apex of the triangle—a block representing about one-thirtieth of the city. Tremendous destruction had been done among the wharves, but well for Jamaica's prospects of recovery this represented practically the only damage sustained by shipping interests. In the course of that first night of the disaster there were further shocks at frequent intervals and the fires broke out again at several points. At 9 a.m. next morning, however, the wind changed, and the fire then practically burned itself out.

Rescue work was begun immediately by the soldiers of the garrison and the municipal authorities, who performed fine service, and very soon the General Hospital was filled to overflowing with the injured. Those for whom accommodation could not be found were taken on board the ships in the harbour or to a hospital improvised at the wharf of the Hamburg-American Steamship Line. The doctors, such as there were available, worked heroically: on board s.s. *Arno* four legs and fifteen arms were amputated in the first two or three days. A curious circumstance noted was that the vast majority of the injuries, apart from head-wounds, were in the left leg or thigh, and I do not think this was ever satisfactorily explained.

On board s.s. *Port Kingston* free asylum was given to all, regardless of race or colour. Dr. Arthur Evans and the whole of the ship's staff laboured among the wounded

like titans for three consecutive days. Sir Alfred Jones related afterwards that the most pathetic case he saw on board the vessel was that of a black boy who was so dreadfully injured that he had to be turned from side to side every few minutes to ease his sufferings. He was tenderly nursed all through the night by a white cabin-boy, the ship's bugler, who fed him at intervals with milk through a straw.

The work of recovering the bodies of the dead from the city's smouldering ruins went on but slowly, for the native population, now that their panic had passed, had fallen into a state of listless apathy in which it was next to impossible to get them to do a hand's turn of work. However, the soldiers toiled on at this labour in addition to their work of patrolling the streets, and gradually the list of known victims lengthened. Space will not permit me to name a tithe of the Europeans who were found to have perished: I will only state that the death-roll included many of the most prominent of Kingston's mercantile and professional community, among them being such men as Mr. McDowell Nathan; Mr. Honeyball, a solicitor, who was killed while attempting the rescue of Mr. Isaac Brandon; Captain Constantine, the R.M.S.P.C.'s commercial representative; Captain Young, commanding the *Arno*; Drs. Motta and Gibb; Mr. Verley, another solicitor; and Messrs. J. W. Middleton, D. Motta, S. de Pass, W. Thwaites, E. de Cordova, J. Wyley, C. Sherlock and L. M. Mordecai, all leading merchants of the city. But one death there was which created world-wide interest—that of Sir James Fergusson, who was instantaneously killed by the collapse of a building while walking in the street. The first fears as to his fate were aroused when he did not return that night to the King's House, where he was staying, and at 5 a.m. the Governor came on board the *Port Kingston* to see if there were any tidings of his guest.

It was estimated on the third day that the deaths in the earthquake and fire would amount to between 500 and 1,000, but even when all the work of extricating the dead was finished it was next to impossible to arrive at a trustworthy total, for it had been necessary for sanitary reasons to burn large numbers of corpses immediately

on great fires built at the corners of the streets. And in the meantime it was of more urgent importance to cater for the living than to compute the dead. Crowds of refugees had left the city for the hills, but there were between 60,000 and 90,000 homeless people in the streets, and for these it was necessary to find shelter, clothing, provisions and medical comforts. For the most part these poor wretches lived on bananas, while temporary shelters were run up for them as quickly as circumstances permitted, for which Sir Alfred Jones made himself largely responsible. "On arrival on board our good steamship," says Mr. Henniker Heaton, "great joy was expressed to find Sir Alfred, notwithstanding his miraculous escape, giving orders clearly, coolly, and forcibly to his secretaries to meet the troubles. 'Let a hundred wooden structures be erected at Constant Spring Hotel, and another hundred at Myrtle Bank Hotel,' was the first order. Then followed instructions for cooking for the poor people . . . I asked Sir Alfred what was the future of Jamaica, and he replied: 'You can take my word for it that this calamity will not interfere in the least with the progress and prosperity of the island. Only the depôt has been injured; the produce and products of the country have not been interfered with in the least degree. The houses that have been destroyed are mostly old and deserve to be destroyed.'" In this latter observation, of course, it is clear that Sir Alfred meant only those abominable slums to which reference has already been made.

With such a multitude of homeless and destitute folk camped out among the ruins of the city, it could hardly be expected that there should be no outbreaks of violence. Actually, the negroes appear to have conducted themselves well on the whole, but there were nevertheless certain cases of looting on the part of rum-frenzied mobs, for its failure to suppress which the Government was afterwards bitterly reproached by the mercantile and professional elements of the community. Attempts were made, too, by the local Chinese to put up the prices of foodstuffs by about 1,000 per cent., and these led to something not far removed from a general riot, the would-be profiteers being compelled to flee for their lives. Whether the most effective steps

possible were taken for the preservation of order is a question upon which divergent opinions were expressed. It must at least be conceded, however, that Sir Alexander Swettenham, Sir Alfred Jones, and officials in general, spared no efforts to deal with a very difficult situation. Special commendation, too, must be accorded to Lady Swettenham, who worked indefatigably, first as a nurse, and later, with her sister, Miss Copeland, as a cook.

No sooner did the news of Kingston's terrible calamity become known than the world, ever generous in such hours of crisis, set to work on preparations to relieve the distressed city's wants. A Mansion House Fund was opened in London, Their Majesties the King and Queen setting the example with munificent subscriptions. Committees were set up in other European capitals, while in America not only did the Red Cross Society take immediate steps to send supplies of all sorts, but the House of Representatives passed an Emergency Bill to authorise the distribution of provisions, clothing, medical comforts and other necessities from the stores of the Navy establishment, and Admiral Evans, commanding the U.S. Atlantic Squadron, which was cruising off Guantanamo, Cuba, at once sent Rear-Admiral Charles Davis to Kingston with medical supplies.

The British Admiralty took the best action within its power by immediately ordering H.M.S. *Brilliant* and H.M.S. *Indefatigable* to Kingston from Bermuda and Trinidad respectively. But those stations were approximately 1,000 miles from the scene of the disaster, whereas Guantanamo was within 12 hours' steam, so there was nothing to occasion surprise when the American ships arrived at Kingston long before our own vessels could possibly get there, and the busybodies who wrote to the newspapers about the Mother Country "callously evading her own responsibilities" were, to put it mildly, talking balderdash.

Friction commenced immediately after Rear-Admiral Davis' arrival, when the Governor objected to the firing of a salute in his own honour on the grounds that the scared inhabitants of Kingston might mistake the gunfire for a fresh earthquake. This incident, of course, appears little short of Gilbertian, but what followed was more serious. For, a serious mutiny having broken out at the

penitentiary, it seems that the American Admiral was "importuned" by Mr. Bourne, the Colonial Secretary, and the Deputy Inspector-General to land an armed force; which he did, under the impression, as he afterwards declared, that these functionaries were speaking on behalf of the Governor. It further appears, however, that Sir Alexander Swettenham was completely unaware of the matter; and so, when the *Indiana* proceeded to loose off a few blank rounds to overawe the mutinous convicts and fifty of her men disembarked under arms for the same purpose, the English Governor not unnaturally jumped to the conclusion that the foreign admiral was taking rather a lot upon himself, and from that moment on his attitude was one of uncompromising hostility.

And the Americans did more than quell the convicts. Assured that the Kingston hospitals could not possibly deal adequately with all the injured, they proceeded to establish a hospital under their own flag in Winchester Park, which was the property of the local Jesuits; and there Fleet Surgeon Norton, of the *Missouri*, aided by the sisters of charity, received more than 50 sufferers from fractures, blood poisoning and neglected wounds. Both the Governor and the Kingston medical officers were bitterly opposed to this American hospital, which they insisted was totally unnecessary, and they declared that although they were perfectly ready to accept American supplies, they did not desire any interference at all with the wounded. Another source of irritation to Sir Alexander lay in the circumstance that a party of American bluejackets was patrolling the streets, levelling the tottering ruins, and clearing away the débris. The Governor insisted that American aid was absolutely unnecessary, as the Government was fully able to maintain order, tend the wounded and succour the homeless.

The correspondence which passed between the two protagonists so clearly illustrates their respective attitudes that it is worth quoting at length. Here is a letter addressed to Sir Alexander Swettenham by Rear-Admiral Davis:

My dear Governor,

I beg you to accept my apology for the mistake in regard to the salute this afternoon. My orders were

misunderstood, and the disregard of your wishes was due to a mistake in the transmission of my order. I trust this apparent disregard of your wishes will be overlooked. I landed working parties from both ships to-day to aid in clearing the various streets and buildings, and propose landing parties to-morrow for the same purpose, unless you expressly do not desire it. I think a good deal might be done in the way of assistance to private individuals without interfering with the forces of yourself or with the Government officials, as our only object in being here is to render such assistance as we can. I trust you will justify me in this matter for the cause of our common humanity. I had a patrol of six men ashore to-day to guard and secure the archives of the U.S. Consulate, with a party of ten for clearing away the wreckage. This party, after finishing its work at the Consulate, assisted a working-party to catch some thieves, recovering from them a safe, taken from a jewellery-store, valued at \$5,000. From this I judge that the police surveillance of the city is inadequate for the protection of private property. Actuated by the same motive—namely, common humanity—I shall direct the medical officers of my squadron to make all efforts to aid cases of distress which might perhaps not come under the observation of your medical officers. I shall have pleasure in meeting you at the hour appointed, 10 a.m. at Headquarters House, and trust that you will approve of my action in this matter.

Your obedient servant,

Charles Davis,

Rear-Admiral.

This missive might, perhaps, have been more tactfully worded; certainly it did nothing to alter Sir Alexander's attitude, and when the gallant Rear-Admiral kept the appointment with that incensed proconsul next morning it was made abundantly clear to him that his action was *not* approved. After being kept waiting for 15 minutes he informed the Governor's A.D.C. that he could wait no longer, and asked him to tell Sir Alexander that in consequence of his attitude he had countermanded the President's order despatching the *Celtic* laden with beef for the relief of Kingston. The Governor arriving at that moment, however,

a brief interview took place, and Sir Alexander then escorted the Rear-Admiral to his carriage. "In the course of the salutations which were exchanged," we are told, "the Governor, replying to the Admiral's expression of regret that he was unable to do anything more for Kingston, said, 'All the more to your honour,' and added with a deep bow (evidently in reply to the Admiral's reference to his departure): 'I should do the same if I were in your place.'"

Following this encounter, Sir Alexander sent the following remarkable letter to Davis :

Dear Admiral,

Thanks very much for your letter, for your kind call, and for all the assistance you have given and offered us. While I most heartily appreciate your very generous offers of assistance, I feel it my duty to ask you to re-embark the working-party and all parties which your kindness prompted you to land. If, in consideration of the American Vice-Consul's assiduous attentions to his family at his country house, the American Consulate should need guarding in your opinion, although he is present and it was unguarded an hour ago, I have no objection to your detailing a force for the sole purpose of guarding it. But the party must not have firearms or anything more offensive than clubs or staves for this function. I find that your working-party this morning was helping Mr. Crosswell to clean his store. Mr. Crosswell is delighted that this work should be done free of cost, and if your Excellency will remain long enough, I am sure all private owners will be glad of the services of the Navy to save them expense. It is no longer a question of humanity. All those who are dead died days ago, and the work of giving men burial is merely one of convenience. I shall be glad to accept delivery of the safe which the alleged thieves took possession of. The American Vice-Consul has no knowledge of it. The store is close to a sentry-post, and the officer in charge of the post professes ignorance of the incident. I believe the police surveillance of the city is adequate for the protection of private property. I may remind your Excellency that not long ago it was discovered that thieves pillaged the house of a New York millionaire during his absence in the summer. But this would not have justified

a British Admiral in landing an armed party to assist the New York Police. I have the honour to be, with profound gratitude and the highest respect, your obedient servant,

*Alexander Swettenham,
Governor.*

Rear-Admiral Davis, who appeared considerably shocked and pained by this communication, then paid another formal call on the Governor to inform him that his ships would sail that afternoon, and when interviewed on the matter he said that this was the only course consistent with the dignity of the United States. The City Council of Jamaica immediately held an emergency meeting and sent a letter to Davis disclaiming the Governor's refusal of American assistance. "On behalf of the Mayor, Council, and all the citizens of this stricken city," wrote Mr. Tait, the Mayor of Kingston, "I ask you not to withdraw," but the Rear-Admiral replied, "I am bound to respect the island's authority." A party of American sailors worked at repairing the hospital building in Winchester Park up to the very last moment, when the American flag was hauled down and the Jesuits resumed charge. The sailors then returned to the naval yacht *Yankton*, which sailed at 1 o'clock, the battleships following at 4 p.m.

The fat was in the fire now with a vengeance. The first development was a cable to Mr. Secretary Root, at Washington, from Mr. Haldane, the English Secretary of State for War, in which he said that on the materials before him he could only entertain feelings of deep gratitude to the American Admiral, "for generous assistance rendered at a most critical time". The *New York Times* wrote, "In great emergencies much is pardoned in those who intend nothing more than helpful kindness," implying that if the American Admiral had acted somewhat unceremoniously, Sir Alexander Swettenham should in the circumstances have overlooked it. In Canada the incident was deplored as likely to mar temporarily the friendly relations between Great Britain and the United States, but at the same time Canadian public opinion was completely on the side of the Governor. "Ordinary courtesy," observed the *Toronto Star*, "required that Admiral Davis should have offered his

assistance and placed himself in the hands of the Governor, instead of which he acted with a great deal of bounce and as if the island were peopled by savages." However, the general trend of the American Press was to the effect that Anglo-American relations were far too big a thing to be disturbed by such an episode, and happily this was the view held in United States Governmental circles. Moreover, it appeared from Rear-Admiral Davis' official report that the incident had first taken its rise amid a mass of mutual misunderstandings, and the matter was allowed to drop by general consent when, a few days later, Sir Alexander Swettenham withdrew his letter and expressed his regrets.

So ended this storm in a West Indian teacup, and Jamaica, no longer the focus of an international "incident", was free to give all its attention to the labour of reconstruction. The situation which faced those charged with the task was admirably summed up in an article in *The Gleaner*: "The blow has been terrible. Just when we were talking of returning prosperity the hand of adversity again touched us, and once more we are called upon to fight our way forward. We will do so. We will build Kingston again, and, with God's help, will build it better. . . . The industries of the island are absolutely uninjured. In this and in our energy lies our future hope. We must work and despair not."

THE CATASTROPHIC STORMS OF 1881

THE CATASTROPHIC STORMS OF 1881

THERE appeared recently in the *Evening News* a photograph of six veteran fishermen, the only Eyemouth men still living of the few who survived the destruction of the North Sea fishing fleets in the frightful tempests which ravaged the British Isles on 14th October, 1881, and for some while after. Out of 189 fishermen who lost their lives no less than 129 hailed from Eyemouth. Yet this Berwickshire village was but one of countless communities plunged suddenly into mourning, for never before or since in the world's history has a storm involved such vast loss of life and material damage as occurred in the short period about to be described. It was said at the time that the fury of the 1881 gales transcended anything experienced in 1868, that terrible storm year, or even on the wild December night of 1879 when the Tay Bridge was blown down.*

The main features of the great storm of 1881 were its sudden uprising and the extremely wide area it covered. Indeed, it seems to have been a cyclone of gigantic circumference, with a diameter of not less than 200 miles, and connected with more extensive atmospheric disturbances beyond. It sprang up on October 14th at about half-past five in the morning, and almost at once the telegraphic wires in all directions were down, almost entirely cutting off London from communication with the greater part of England, Scotland and Ireland. In London itself the havoc wrought was sufficiently appalling. From every district came news of collapsed walls and roofs and uprooted trees, of numerous deaths and maimings. In Charles Street a boy had been killed and five other people seriously injured by the fall of a brick shaft on the premises of Hancock

* See *Great Disasters of the World*.

and Company, the rubber manufacturers. At the new Great Eastern Goods Station in Shoreditch a massive gable, composed of tons of brickwork and stone, had given way and fallen outwards, but, mercifully, just after the men working on the scaffolding had left the building to shelter from a rain-shower. A barge had foundered at Pimlico; the river steamers had been compelled to suspend business.

And when communication with the Provinces was restored, even worse was the tale of disaster. A smoke-stack 130 feet high at Messrs. Salter's spring-scale works in Birmingham had been blown down, causing the deaths of three men and injuring others. At the entrance of the Mersey, the coasting-steamers *Liverpool* and *Jessie Brown* had collided, the latter vessel sinking shortly afterwards. Another collision had taken place between the Wallasey ferry-steamers *Heather Bell* and *Seymour*, while the ship *Queen of Scots* had broken from her moorings and drifted ashore near the entrance to Prince's Basin, and waves had swept over the landing stage for a distance of 50 yards, so that the huge structure was in constant motion like a vessel in a heavy sea. From Oswestry came the tidings that two bridges had been swept away between Bala and Dolgelly, and that the vicinity of the Severn presented the appearance of an inland sea. At Parkgate, near Chester, the tide was quite over the Esplanade and the waves dashing against the houses facing the river—an unprecedented occurrence. In Edinburgh people had actually had to lie down in the streets to avoid being blown away. All over the country trees had been torn up by the roots and pounded to pieces; seagulls were alighting everywhere along the coasts in a state of utter exhaustion, helpless even to prevent themselves being caught. . . .

But if the record of calamity on land was dreadful, how infinitely more so was the tale of sea disasters! It was computed that off the coasts of the United Kingdom no less than 85 vessels had met their end, representing a loss of shipping property to the value of £8,000,000, three-quarters of which was British, and of some 43,000 tons of produce and other merchandise. Anything like a detailed list of the lost ships would be out of place here, but a few cases merit particular attention. The *Jane & Hannah*, a

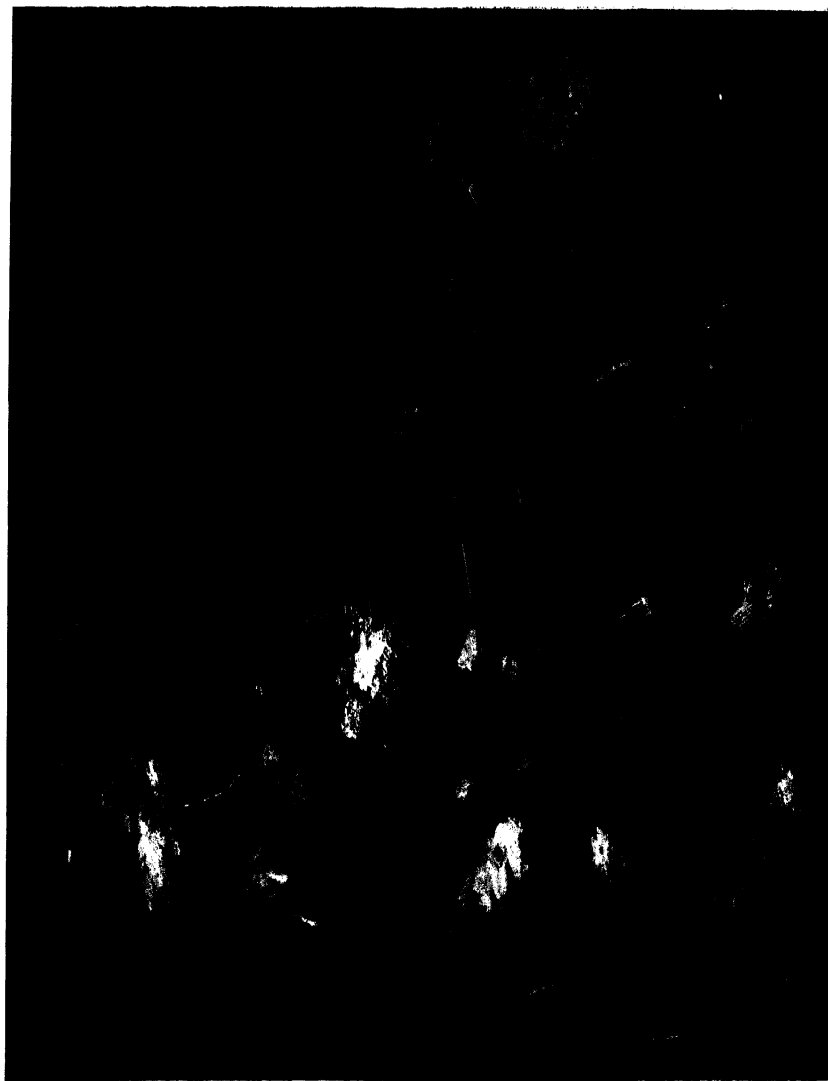
screw-wherry carrying a cargo of iron from Middlesbrough, foundered two miles off Blyth, at 5 p.m. Another vessel out of Middlesbrough, the iron ship *Ganges*, bound for Calcutta, went aground on the Goodwin Sands. The captain and sixteen of the crew were brought ashore by the Deal lifeboat, while fifteen more of the crew were landed at Ramsgate. Five days later a boat with the name *Ganges* painted on it, and containing the dead body of a young man, was washed ashore at Berck-sur-Mer, Pas de Calais. The barque *Snowdonia*, of London, bound from Bull River for Berwick, went to the bottom off North Sunderland with all hands.

Specially notable, if only for the heroism displayed by the master, was the wreck of the Liverpool steamer *Cyprian*. This vessel, belonging to Frederick Leyland & Company, left Liverpool on the 13th under the command of Captain John Alexander Strachan and with a crew of 27 hands, bound for Genoa and other Mediterranean ports. Early next morning, in Carnarvon Bay, she encountered the full force of the tremendous gale. After she had been labouring heavily for some hours without making much progress, her decks swept continually by great seas that broke over her with a roar like that of artillery, the steering-gear of the fore wheelhouse gave way, and almost simultaneously the tubes of one of her boilers burst, the water putting out some of the furnaces. Shortly afterwards the steering-gear in the after wheel-house broke down also, whereupon, naturally, the ship became unmanageable. At 5 p.m. the remaining furnaces were extinguished by the bursting of more of the boiler-tubes, rendering the engines useless. Thereafter the stricken vessel could only wallow helplessly in the trough of the mountainous seas, drifting all the while closer to the shore. Every effort was made to keep her out to sea, but to no purpose : after a struggle lasting five hours she struck on a rock some two miles off Nevin. In vain the poor fellows aboard her looked for assistance from the lifeboat ; the seas breaking on the coast were so terrific that to launch it was beyond human power. At last, when it was obvious that presently the ship must break in two, the crew jumped into the sea, where most of them immediately perished. Seven men and

a boy somehow reached the shore alive. The boy was a stowaway, but he owed his salvation to a lifebelt given him by Captain Strachan, who had said with assumed non-chalance, pointing to the shore, "You take this, my boy ; I can swim that far !" That the eight survivors escaped death seems little short of a miracle, for so battered were the corpses of those who did not share their good fortune that only five could be identified. One was that of the brave young captain—he was only 30 years of age, had been married but two years, and left a little son of 12 months old ; others were Joshua Craven, the chief officer, John Davis, the chief steward, and William Armstrong, the engineer.

But of all the disastrous happenings, that which struck the public imagination with the profoundest sense of tragedy was the destruction of the North Sea fishing-boats. The storm had obliterated half of the working fishermen along 20 miles of coast ; hundreds of families found themselves suddenly faced with ruin—some 400 widows and children utterly unprovided for. And the circumstances in connection with the loss of the fishermen were the more painful because the poor fellows had been such a notably industrious, frugal, and sober body of men. Within recent years a great trade in herring-fishing had developed in connection with the Tyneside region. During the period May to September, about 120 Scottish fishing-vessels pursued that calling from the Tyne. Berwickshire in general, and Eyemouth in particular, had been extremely successful, and the fishermen had put their accumulated savings into large keel-boats, which they had fitted out with first-class gear. Now not only were their lives lost, but all the fruits of their prudence and industry were swept away at one stroke.

When the giant gale caught the fishing-fleet in its teeth, the boats made a desperate bid for safety. Some managed somehow to fight their way to harbour, others were overtaken by their fate at the last moment, when in sight of salvation. A number of Berwick's boats, struggling bravely for harbour, were driven off their course and flung on the Spital Point ; another was actually lost with all hands behind Berwick Pier. Out of 16 fishing-boats belonging



CATASTROPHIC STORMS OF 1881
"And stop by him the little *Victor* did."

to St. Aithes, between Middlesbrough and Whitby, 12 never reached home. At Dunbar a fishing-boat, the *Alice of Boddam*, which had gone off to the line fishing in the early morning, was later seen fighting her way in up the harbour. A very heavy sea struck her and she staggered, but only to right again. Then came a second enormous sea, and this time the unfortunate little craft was overwhelmed and went to the bottom like a stone, her crew of seven all being drowned. This pitiless drama was enacted in full sight of a crowd of spectators on the East Pier, helpless to render any assistance, it having been found impossible to launch the lifeboat.

Up to the evening of the 16th, 16 boats were still missing from Eyemouth and two or three from Burnmouth; 59 men were definitely known to have been drowned, of 140 others there were no tidings. It was then that a deputation from Eyemouth visited Captain Sanders, commanding the gun-boat H.M.S. *Ariel*, which was having her boilers repaired, and begged him to put to sea and search for the missing fishing-boats. Like the good fellow he must have been, he promised without hesitation to get his vessel ready for sea and, if the commander of the district gave his assent, conduct a diligent hunt. This he did, but to little purpose, as is shown by the following extract from a letter to his father: "Next morning at high tide I went to sea, taking three fishermen with me, two of whom had been out in the fearful storm. One of them, poor fellow, had lost three brothers in it, and even now I can hardly get his sad, wistful look out of my mind, ever scanning the face of the sea with an eager, yearning look. Alas, all in vain! We only just managed to get out of harbour, as the bar had hardly got over the effects of the gale. . . . We came across the wreckage of one boat undoubtedly, passing first one thing and then another, all clearly belonging to the same boat, and at last we came across the tiller, and I lowered a boat and picked it up. There was no name on it, but they seemed to think it would be identified at their village—Eymouth."

During the days that followed the great tempest of the 14th, numbers of battered, waterlogged wrecks were encountered drifting about off the coast, and towed into

port. The first such derelict picked up was the *Juliesche*, a schooner belonging to Tonsberg. This vessel, which was brought into Dover by the Deal lifeboat and the *Briton's Pride*, had been found drifting about after having been on the Goodwin Sands, only her cargo of timber keeping her afloat. Her condition bore mute yet eloquent testimony to the fury of the gale, for both masts had been snapped off close to the deck, the bulwarks had disappeared, and in some places the decks were actually torn up.

On the 17th a spark of false hope was kindled in the breasts of those waiting in agonised suspense in the fishing districts by the arrival at Burntisland of the steamer *James Keler*, from Rotterdam, which reported having sighted a large number of fishing-boats 60 miles off May Island. For a time it was vainly imagined that these must be the missing boats, but the dragging days brought no further tidings, and gradually hope was again abandoned. Then the schooner *Hellas*, bound from Quebec for the Tyne with timber, was found floating waterlogged and abandoned by her crew, but aboard her were three or four fishermen. These however belonged to Hull and Grimsby. But on the 18th four bodies were washed ashore between Holy Island and Eyemouth; one was that of Peter Peterson, skipper and owner of the *Wave*, another was that of John Burgon, of the *Blossom*, and a third that of Alexander Cribbles, of the *Forget-me-not*. These earthly remains were carried to the grave through streets lined by mourning women and children. The services were conducted in the houses from which the funerals proceeded, the coffins being interred in silence and without any service at the graveside. Eyemouth was literally numbed by its great affliction, it was a veritable village of death. In one house an old man was bereft of three sons, two brothers and six nephews. In another case a woman had lost her husband, a son, and nearly all her other male relations, and was left to struggle through life as best she could with five unmarried daughters. A few days later several more bodies were cast ashore, together with the oars of two of the missing boats, the *Florida* and the *Sunshine*, while the *Alice*, of Burnmouth, was found lying bottom up on the beach of Holy Island.

Public meetings were held without delay at Berwick and at Eyemouth to raise subscriptions for the benefit of the destitute families of the lost fishermen, and at the Eyemouth meeting about £1,000 was promised, Mr. Edward Marjoribanks, M.P., opening the list with a donation of £200. Before the end of October the subscriptions raised in the two neighbourhoods totalled nearly £4,000. And from all parts of the country monetary aid poured in. Particularly touching was a gift of 100 guineas sent to the Secretary of the Shipwrecked Fishermen & Mariners' Royal Benevolent Society by an anonymous girl of 15, who wrote: "As this is the anniversary of my birth, I desire to send my parents' birthday gift as my first donation to your funds."

But no later than the 19th, before the country had recovered from its first amazed horror at the dreadful series of catastrophes inflicted by the previous Friday's storm, came another gale of equal violence, and the tale of calamity began afresh. In this second disastrous week 58 vessels, mostly English, were lost off the coasts of the United Kingdom, and 673 persons were reported dead or missing. The most notable wreck in this fresh harvest of destruction was, perhaps, that of the Dutch emigrant-ship *Koning der Nederlanden*, which foundered in the North Sea with 800 souls on board; but as a drama of the sea the loss of the *Clan Macduff* must take first place.

The *Clan Macduff*, of the Clan Line of traders, belonging to Cayzer, Irvine & Company, of Glasgow, was a 1,496-ton steamer formerly called the *City of Oxford*. She sailed from Liverpool on October 18th with a valuable general cargo, chiefly Manchester goods, and 19 passengers, all for Bombay. Among these were two actress sisters, Miss Ada and Miss Alice Akhurst, the former of whom was extremely well-known and a popular favourite of the day. They were on their way to India to fulfil a theatrical engagement, and were accompanied by Miss Lizzie Hayes, Mr. J. Turner, who was the stage manager, Mr. and Mrs. Mercer (Miss Kate Thorburn), a brother of theirs, and several others.

At 9.30 on the morning after the vessel's departure, the wind began to freshen from the south-east, with the sea running high, and by the afternoon both wind and

sea were fiercer still. Towards evening the bilge-pumps began to choke up in the engine-room. The seas were not as yet powerful enough to break over the ship, but nevertheless the situation was growing serious, and all through that night the whole engineer staff was engaged in frantic endeavours to clear the pumps. Strive as they would, however, their efforts only met with failure, so in the morning everyone, except the man at the wheel, was ordered below to help. A leak was then discovered in the engine-room, and almost immediately afterwards a steam-pipe got washed away by the sea, which allowed yet more water to find its way in. They plugged the aperture with blankets and waste, but still the water gained in the engine-room, and as it increased in depth the coal in the stokehold broke away some sea-pipes connected with the feeding of the boiler, so that an even heavier leak set in. The coals and other rubbish which accumulates in bilges had by this time become so tightly jammed that there was no longer the remotest hope of clearing the bilge-pumps, so as many men as could get near the stokeholes simply passed buckets up and down, throwing their contents out of the ship.

This state of affairs continued until 1 p.m., while the force of the wind and the waves augmented steadily, the vessel by this time rolling very heavily and being swept perpetually from stem to stern by terrific seas. Before long the water in the stokeholes and engine-room was six feet in depth. Convinced now that his ship was bound to founder, the captain ordered out the boats, and those on the lee side were prepared first. No sooner was the larger lifeboat launched alongside, however, than it was hurled against the side of the ship and smashed to match-wood. The terror of the women and children when they witnessed this mishap was heartrending; they set up a pitiful screaming, but their cries and the shouts of the officers were drowned in the full-throated roar of the gale.

However, the next venture had better fortune, for after an interval the gig was safely launched, and into it were lowered four able-bodied seamen, the fourth officer, Mr. T. P. Barclay, and Mrs. Barclay and their child. The gig drifted clear and was lost to view within a few minutes

among the hills and dales of the gigantic seas. The next boat launched was the cutter, containing the third officer, the second cook and two able-bodied seamen. When she had safely dropped alongside, Mr. and Mrs. Mercer, Mrs. Jacobs and Mr. Akhurst were given lifebuoys and, with lines tied around them, jumped into the water from the deck, after which they were hauled into the boat. Then Mrs. Jacobs' little girl, aged four, was thrown down to her, but a sudden roll separated the ship from the cutter, and the poor little thing fell into the water and was immediately drawn out of sight by the suction. A moment later the boat rose again to the ship's side. Instantly the captain threw down the second Jacobs child, a boy, who landed without mishap in the arms of his frantic mother. Then the boat was cut away and, like the first, quickly dropped astern out of view.

There was now only one boat left for 45 people—the storm had pounded the rest to smithereens—and it would hold 30 at the most. Ridgeway, the second officer, and two men got in and were lowered with it ; then the remainder of the passengers, the chief cook, five stewards and the stewardess leaped into the sea and were hauled in. The captain then handed a lifebuoy to the chief steward, saying, "Get on this." The other, however, refused, whereupon the captain is alleged to have exclaimed, "Well, if you won't, I will," and to have taken back the lifebuoy and made a jump for it. The members of the crew left on board were understandably startled at his desertion ; and so, it would seem, were the passengers in the boat, for when he reached it they could be seen upbraiding him for leaving his men to their fate in a sinking ship.

The chief officer now took command of the *Clan Macduff*, and when night came on he burned flares and continued to fire signals of distress. But none came to his assistance, and all through the night the vessel lay wallowing in the trough of the seas, completely at the storm's mercy. As morning broke she began to settle down aft, with the sea pouring in from the 'tween-decks and through the saloon. Once more the dead-weary men began to bale, but still the water gained, beginning now to force its way into the store-room. By noon next day, the 21st, the deck

was level with the sea, and hope there seemed none. But at that very juncture the carpenter sighted a steamer to leeward: two of the crew ran up the rigging and hoisted sheets and flags. At first the stranger seemed to pay no attention, but when about four miles away she suddenly put about, and two hours later was within hailing distance and had launched a couple of boats. Ten men jumped into the water from the *Clan Macduff's* flooded decks and were drawn on board; the rest were picked up a few minutes later. The Good Samaritan—the *Upupa*, her name was, and she was commanded by Captain James Maxwell Brown—stood alongside till 9 o'clock. At that hour, however, the *Clan Macduff* suddenly disappeared in a terrific squall, and when the weather lifted she was no more. The *Upupa* then bore in for Plymouth, where she arrived on the 23rd after weathering on the night of the 21st another fearful gale in which 200 head of cattle were washed overboard.

The boat under the second officer's charge was picked up at 9 a.m. by s.s. *Palestine*, about eight miles off Ballycotton. In it were that officer and the two members of the crew, but no one else. They reported that at 6.30 the boat had been capsized and all of its human freight thrown out. The chief engineer, one fireman, two seamen and Ridgeway had managed to hold on and climb back into the boat when, presently, it righted; but the rest had all been drowned, and later the chief engineer had died from exhaustion, while the fireman went mad and jumped overboard. Even more deplorable must have been the fate of those in the lifeboat which first left the *Clan Macduff*, for on the 22nd it drifted ashore at the Seven Heads, near Clonakilty—empty save for the corpse of a beautiful young girl, who was identified later on as one of the Miss Akhursts.

Throughout the period of the gales the lifeboats of the Royal National Lifeboat Institution performed service beyond the powers of praise, saving a total of about 280 lives. Among the most signal acts of bravery was that of the crew of the lifeboat *Herbert Ingram*, which brought off seven men from the barque *Lom* off Skegness in the height of the gale, a task which necessitated seven or eight hours of sustained labour. Another conspicuous episode took place in connection with the wreck of the barque *Lebu*

off Douglas. The lifeboat *John Turner* went out first to the stricken vessel, but after several hours of toilsome effort, seeing the signal of distress hauled down again, returned to shore. However, later in the afternoon the signal was hoisted again, whereupon the lifeboat *Two Sisters*, the gift of Manchester and Salford Sunday school scholars, put out to the *Lebu's* assistance. Here is the first mate's unpretentious account of the tragic events which followed: "About 5.30 the lifeboat got alongside. The crew were alarmed and, contrary to the desire of the captain, insisted on getting into the lifeboat. Finding that we were left alone, I got on board the lifeboat, and was followed by the master. It would then be getting on for 7 o'clock, and was very dark and tempestuous, with a rough sea on. About a quarter of an hour after we left the barque the lifeboat jibbed and capsized, and every soul on board was thrown into the water. The boat righted herself immediately. I managed to get into the boat and pulled in the wife of the steward. I then got one of the crew of the lifeboat in. I next saw my wife and managed to get her in also. . . . We pulled for some time, but we could not find any trace of anyone else. I did not see the captain of the barque after the lifeboat capsized." Actually, the mishap to the *Two Sisters* cost 12 lives—the captain of the *Lebu* and seven of her crew, and four of the lifeboat men, two of whom were married and had large families.

Finally, a word must be added in praise of the magnificent work performed by the Channel tugs during the period of those epoch-making storms, and no more stirring instance could be cited than the saving of the ship *Allanshaw*. This vessel was sighted running from the Downs towards the North Foreland about 3 p.m. on October 14th, when the gale was at the height of its violence. She was making signals of distress, and already the tug *Napoleon* was following in her wake with the evident intention of going to the rescue. Another tug, the *Victor*, then put out and offered her assistance, the two little vessels together undertaking to hold the plunging ship, which had lost her anchors and chains, broken her windlass, and had most of her sails blown away.

With great difficulty the *Victor* got her rope on board the

Allanshaw. The *Napoleon* made every effort to do likewise, but failed owing to there being too much sea on for her to get within distance. At 3.30, therefore, the *Victor* began towing alone, while the other tug continued its attempts to establish contact. As could only be expected, the plucky little *Victor*, with the sea breaking right over her, was able to make very little progress, though steaming at full power. An hour later the *Napoleon* was compelled to desist and leave the ship. She dropped behind, vanishing into the waste of heaving water and flying spray, and as nothing was ever seen of her again it is to be presumed she foundered soon afterwards.

Left all alone now to do his best for the disabled vessel, Mr. John McCarthy, the *Victor*'s master, managed to hold her fast until 11.30 p.m., with a heavy hurricane sea breaking over his boat all the time. So terrific was the gale that he was obliged to lash himself to the rail, and the man at the wheel was secured in like manner. At 11.30 the rope broke at the ship's bow. McCarthy then got as close as he could under the stern of the *Allanshaw* and shouted out to her captain, "Set your topsails and wear the ship fore!" whereupon the captain shouted back that his topsails were all split. "Then do *something* to wear the ship," insisted McCarthy. "All right," was the reply, "but don't leave me." And to that came the reassuring answer, "No, I'll not leave you; I'll stop by you, if all goes right, till the weather moderates."

And stop by him the little *Victor* did, and at 4.30 a.m. managed to get hold of the ship's rope and commence towing again. At 11 a.m. she was joined by another tug, the *Hibernia*, and eventually, after almost unbelievable struggles, the *Allanshaw* was brought up the river and safely berthed in the Albert Dock.

Such were the main features of the terrible storms of '81. It has only been possible in the compass of this chapter to recount them in outline; imagination must fill in the gaps, visualising the innumerable private human tragedies involved. As a fitting conclusion—one that may serve to stimulate imagination in that direction—here is a message that was found scrawled on a piece of paper enclosed in a bottle the sea threw up at Orkney: *Barque*

"Minna Watson", Nova Scotia. Lat. 59 deg. 10 min. N., Long. 4 deg. 45 min. W. Oct. 17. Three days off. Fearful weather. Leaking very much. Never expect to see home or friends again. God bless all. Thomas Jackson. And on the other side of the paper was added: Our last day. Oh such a gale and sea! The poor ship is nearly a complete wreck. Heaven have mercy on us!

THE PAISLEY CINEMA TRAGEDY

THE PAISLEY CINEMA TRAGEDY

OF all festivals in the year, none is dearer to the hearts of Scottish folk than that of Hogmanay, or, as we call it in England, New Year's Eve. On that night Scots the whole world over thrust aside their cares to join in a general rejoicing and giving of presents, and especially is it a feast for the little ones. It was a happy thought, therefore, on the part of the British Broadcasting Corporation when in 1929 it decided to signalise New Year's Eve in a manner which would hold a special appeal to its millions of Scottish listeners. But at 10.15 p.m., in place of the entertainment planned, the following sinister announcement came over the ether: "*This is London calling. Our surprise item to-night was to have been all-Scottish, representative of Hogmanay. You have heard of the terrible disaster which has befallen Paisley, and will appreciate the motive which prompts us not to broadcast this surprise item.*" And then came a pregnant silence of four minutes. . . .

The majority of those who heard these solemn words were, doubtless, already in possession of the facts, but there must none the less have been many to whom this was the first intimation of the awful tragedy in which a large number of little children had met with a terrible death. Apart from the fact that this was by far the worst cinema disaster ever experienced in Great Britain, the tragedy was made additionally poignant by the extreme youth of the victims, the majority of whom were under three years of age, while in the first casualty-list issued only one was over twelve. And again, it derived a special horror from the circumstance of its coming to pass on that one night of the whole year. In his message of condolence to the Provost of Paisley the Prime Minister wrote: "Such a tragedy at any time would have moved the country to

sorrow, but happening yesterday, when everyone was happy with children, was giving himself to them, and was planning feasts and gaiety so that the little ones might laugh and be glad—deep indeed is the gloom which this devastation has cast upon us. . . . Everyone blessed by having their children around them understands in the most intimate way the torturing sorrow which is in the hearts of so many of your citizens.”

The Glen Cinema was a building situated at Paisley Cross, in the Market Square, some 30 or 40 years old and known in former days as the Alexandra Hall. It was established afterwards that on the morning of New Year's Eve the place was inspected by a member of the fire brigade staff and passed as being in order. On the other hand, this report of his can be interpreted only as implying that the building was in order so far as it ever could be so described. For it was stated in evidence by Mr. James Graham, the proprietor of the cinema, that there were not enough exits, and that when he took over the hall he had been promised a new entrance, but that nothing had been done about it. Indeed, now that the catastrophe was *fait accompli*, he had been informed by the authorities that he must construct two new entrances, two stone staircases to the balcony, and a new rewinding-room and operating-box. His evidence was confirmed by Mr. Robert Christie, an official of the Paisley Corporation, who attested that two or three years before there had indeed been mooted a scheme which included the provision of the cinema with another entrance, though nothing had come of it.

On Hogmanay afternoon there was a special children's matinée, and this was attended by an abnormally large crowd drawn from the poorer classes. Overcrowding is mentioned specifically in the official report as having been one of the direct causes of the dreadful affair which followed. Some of the less responsible newspapers wrote of an audience of 2000. Actually, it numbered between 500 and 600, but even so it obviously must have been larger than the place was ever meant to hold, for it was officially stated that children had been standing up between the seats.

By an ironical coincidence the film first shown was one entitled "The Crowd", in which occurred a pathetic scene

depicting the death of a child. A father comes home with an armful of toys purchased with money won in a slogan-competition. He and his wife call to their children from an upper window and the little ones come running across the street, but in the mad, careless dash the little girl is knocked down by an oncoming lorry and fatally injured. It was when this harrowing drama had just been completed, and when a two-reel comedy was about to be put on to revive the spirits of the audience, that the calamity came to pass.

Following the usual custom, the used film was carried off to the re-winding room by a 15-year-old member of the staff named James McVay, while Alexander Rosie, the operator, a native of Port Dundas, Glasgow, proceeded to start showing the new picture. Scarcely had he commenced, however, when a loud hissing noise suddenly arose from the direction of the re-winding room, and simultaneously he was horrified to observe black smoke pouring into his operating-box, filling the vestibule, and creeping round the door which led into the auditorium. Terror-stricken, young McVay came rushing in to report that part of the film which he had just deposited in a metal box had begun to smoulder.

Hearing screams from the auditorium, Rosie groped his way along the passage through the choking smoke and presently encountered a party of children, in a great state of agitation, whom he conducted out of the premises by a side-entrance. McVay, meanwhile, had picked up the box containing the burning film and attempted to remove it to the open air. On reaching the vestibule, however, he was so overcome by the fumes that he could carry it no farther, so set it down and staggered away to warn Rosie and, this done, to find Mr. Charles Dorward, the manager of the cinema. It must have been a painful thought afterwards to young McVay that if he had only managed to reach one of the side-doors with the box, instead of depositing it in the passage, the whole vast tragedy might have been averted.

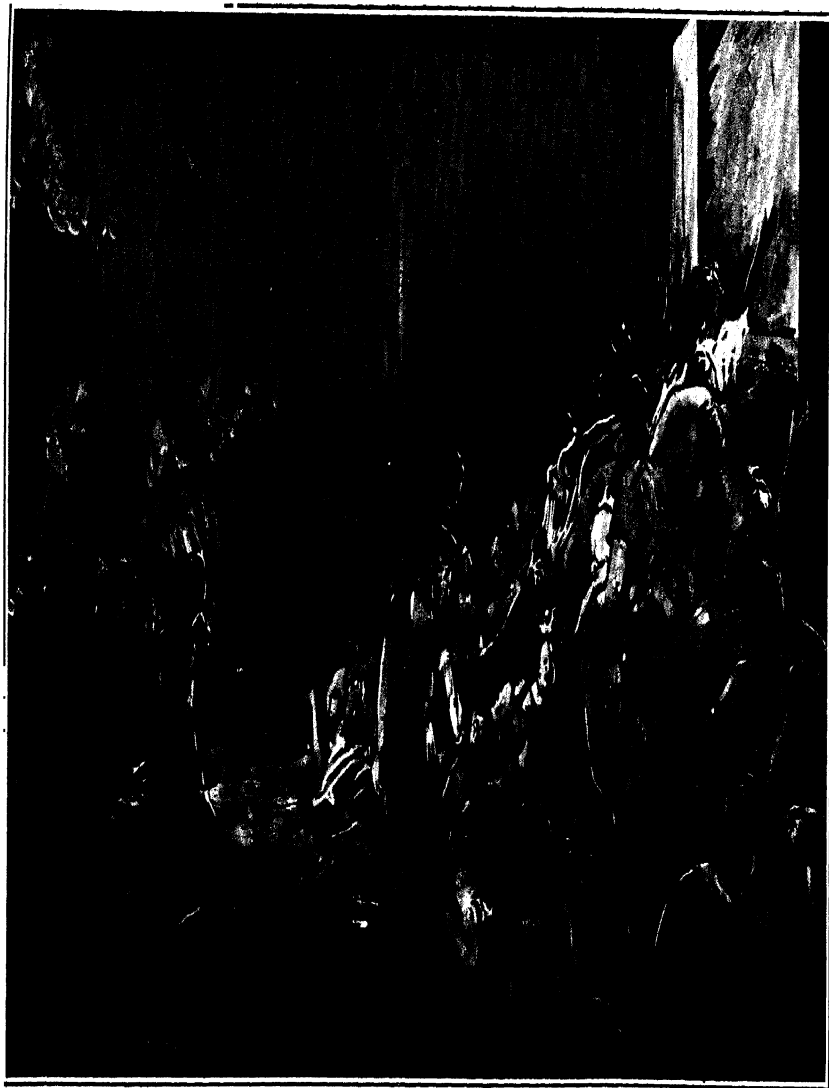
Dorward at once rushed to the vestibule, carried the smoking box to a side-door, and kicked it out on to an adjoining piece of waste ground. But by this time the damage was done. Someone had observed the fumes creeping into the

auditorium, a cry of "Fire !" had been raised, and, despite every effort of the attendants to calm the children, panic broke out and they made a wild stampede for the exits. Naturally enough, too, it was for the doors farthest removed from where the smoke had been observed that they rushed. In vain Dorward tried to persuade them to return and make their way out by the other doors, which had been thrown wide open : they were maddened by fear, utterly unable to listen to reason or persuasion.

Let some of the children who were lucky enough to escape with their lives tell in their own artless words the story of that mad stampede. Here is the account of James Dickie, aged twelve : "I paid a penny for a seat, which I got near the front. The first picture had just started when I heard screams. Turning round, I saw smoke, and the other children were rushing for the door at the street end of the picture-house. I was knocked down and was trampled upon by other children. I scrambled and shouted, 'Get up !' I managed to raise my head, when I saw firemen. One of them said, 'Follow me.' I did so, and suddenly a man pulled me through the door to safety. When I got out women were at the door crying for their children. My three chums were also saved. It was terrible. My legs were hurt through the children falling on me, and I was nearly suffocated. I took a long time to breathe freely. There was a smell like gas."

Again, "I was sitting in the centre of the hall," we are told by John McDowall, a nine-year-old, "when somebody in the balcony shouted, 'Fire !' and we all rushed towards the door at the back of the screen. The children in front of me crowded the corridors and fell over each other in a heap. I was pushed from behind, but I managed to keep from falling. I was terribly afraid, and thought I could not get out, when somebody broke the outside door open and helped me out. I could hear little girls shouting that they had lost their babies, meaning that they had lost their little brothers and sisters whom they had taken to the pictures." There is something ineffably pathetic in that ingenuous statement : "I could hear little girls shouting that they had lost their babies. . . ."

But of all the children's narratives, for sheer grit and



PAISLEY CINEMA TRAGEDY

"They were as tightly packed as a wall of cement-bags."

level-headedness we must give the palm to little Jeannie Brown, aged ten. "I smelt reek coming from the operative box," says she, "and then all the folk began to run to the main door. I wasn't frightened. I took Mary by one hand and Emily by the other"—these were her baby sisters, aged five and three respectively!—"and started to follow the crowd rushing to the door. The firemen came in behind us and told us that the other doors were open. When I turned to go to the other door I lost Emily, and it was only then that I began to feel frightened. When we were passing the stage to get to the side-door there was a rush from behind, and both of us were knocked down and Mary began to cry. When I got outside I started looking for Emily, and a policeman told me she had been taken to the infirmary."

Actually, however, the last statement turned out to be erroneous, and attached to this matter of wee Emily there was no little drama. For Emily's mother heard the story of her being in the infirmary, as also did an aunt, and the latter was hastening fearfully to the infirmary when whom should she meet but Emily herself, who had made her escape alone and unaided!

It will have been noticed that the narrators of the foregoing accounts make mention of firemen appearing in the hall during the panic. The theatre being situated in the centre of Paisley, the shrieks of the terrified children very quickly attracted hundreds of would-be helpers, while large squads of police and firemen came hurrying to the scene. Setting ladders against the building, these ran up and smashed the windows, and then, assisted by the onlookers and tramwaymen who had left their cars standing in the street, pulled scores of children through the apertures and passed them hand over hand down the ladders to the ground. The air was still so thick with fumes that the rescuers had to improvise gas-masks by tying handkerchiefs over their faces. One brave lad of 15, James Johnstone, lost his life through re-entering the cinema to save a little girl after he had won to safety. . . .

Terrible sights awaited the eyes of the men who burst their way in on their errand of rescue. "When we reached the theatre," says Deputy Firemaster Wilson, of the Paisley Fire Brigade, who was one of the first on the spot, "several

civilians cried out, 'For God's sake get your smoke-helmets; we can't get in through the smoke. The cinema's full of children!' As soon as my men heard about the children there was no holding them back. Smoke-helmets or no smoke-helmets, they were off the engine and through the passage without delay. The fumes were not so bad in the theatre itself. We managed to head off one crowd of children and turned them back to a safe exit.

"On the stair leading to one exit the children were packed in a horrible heap. Some of them had been so badly frightened that they started to climb up the screen at the head of the stair. Behind the screen the space was packed with children huddled together in every conceivable attitude. They were as tightly packed as a wall of cement-bags. Some still moved, others were motionless. Legs and arms were intertwined in the most appalling tangle. In some cases it took two of us, working gently, to extricate one child."

The firemen were badly shaken, disinclined to talk. But here is the description of the terrible spectacle around that screen given by another of the men, when at last he could be induced to speak: "There was a solid mass of humanity round the screen when we fought our way in. Half a dozen terror-stricken youngsters grasped hold of my coat and my belt, and I just turned and grabbed them all out into the fresh air. Living and dead were lying breast-high near the exits. Some of the children were blue in the face and very still: others could still scream. I saw what seemed to be a baby of about eighteen months lying in the pile. Some of the youngsters who were still alive seemed to have gone mad with terror. There was one jammed in a corner surrounded by dead bodies. The child was not looking at the bodies, but upwards, and all the time he whimpered as if he were trying to ward off something that threatened to overwhelm him. His danger from crushing was over, but he still seemed to imagine that he was in that terrible fight for life."

The most awful scenes of all, however, took place on the stairs leading down from the balcony to one of the exits. The question of how the iron trellis-gate at the foot of those stairs came to be shut will be examined in its proper place,

when we come to the subsequent official inquiry, but shut it unquestionably was, and as the stampeding children came against this obstruction they piled themselves up behind it in a horrible jammed mass. Sick with horror at the gruesome sight behind the trellis, the crowd wrenched and tugged at it until at last it gave way and they were able to get at the unfortunate little victims. The first man on the scene at this grim gate of death seems to have been one John Lindsay Macpherson, who thus describes what he beheld: "I saw a boy climbing over the iron gate, which was *locked*. It was a perfectly horrible scene of panic and terror. Behind the trellis-gate was a dense mass of children. I spoke to one or two in order to cheer them up, but after a few seconds I found they were dead. So great was the pressure that the faces of many of them quickly turned black. I saw one little girl walking slowly forward. She had her arms outstretched and was staring fixedly in front of her. She advanced over this mass of bodies—a human floor of children—but I do not think she knew what she was doing." Another eyewitness tells us that the dead and dying children were heaped up to a height of six feet: "It was a solid mass of children. . . . From the top to the bottom of the steps, and along the passage, they were jammed with legs and arms intertwined, piled up in a great heap and crushing and suffocating one another."

As fast as the children were extricated they were laid in a builder's yard close beside the cinema. There was only one doctor available on the spot, but he appealed for help to the people there and showed them how to apply artificial respiration. Many of the women, though distraught with anxiety concerning the fate of their own youngsters, pluckily stood by him and worked like Trojans under his direction. Among their number was Mrs. Brown, the mother of brave little Jeannie, whose story has already been told.

The Royal Alexandra Infirmary was situated a little more than half a mile from the scene of the calamity. Even with every available ambulance in Paisley put into service, it was quite impossible to convey all the unconscious children there as quickly as their precarious condition demanded, and accordingly the tramcars, and every other sort of vehicle that could be requisitioned, were employed to fill the rôle

of extra ambulances. Within a most creditably short space of time 150 of the little victims had been whirled off to the infirmary.

The news of the dreadful happening had spread like wildfire through the town. Hundreds of parents who knew that their offspring had attended the matinée besieged the theatre clamouring for news. Many of them were sobbing hysterically as they awaited tidings, and one poor fellow collapsed in a dead faint on learning that his three little ones were all numbered among the dead. Having shut the doors of the theatre to exclude the public, the officials made a final thorough search of the building. Their care received a melancholy reward, for the bodies of two more little children were discovered huddled together in the orchestra pit, where they appeared to have crept for shelter after finding the passages to the doors blocked by the mounds of corpses.

As tramload after tramload of unconscious children was rushed to the infirmary, a frantic mob of parents rushed after the cars through the streets, and in a few minutes both the hospital and the police-station were surrounded by weeping relatives and friends. So severe did the stress become that it was found unavoidable to refuse admission to the infirmary to all save the injured and those attending them.

The scenes at the hospital were such as almost to defy description. As the children arrived by the carload, they were hurried off at once to the wards. In only too many instances the briefest of inspections sufficed to show that life was extinct, and before long some of the outer rooms were filled with rows of little forms already certified as dead.

The staff of the infirmary being hopelessly inadequate to cope with such an unprecedented rush of patients, an appeal had to be made for volunteer assistants. The call was answered at once, but even then everyone concerned had to work unceasingly and at top pressure. So rapidly were the victims brought in that it actually became necessary to hurry the bodies of those beyond human aid to a lift and convey them to the basement, in order to make room for those whom there was still a chance of saving by immediate treatment. Arrived at the basement, the little corpses

were placed on trolleys by twos and threes and rushed along a tunnel to the mortuary. And when the mortuary was full, other rooms were converted to a like use.

The human drama enacted at the hospital was no less heartrending than that which had taken place at the cinema—so distressing, indeed, that even some of the professional nurses, accustomed though they were to the sight of suffering, were almost overcome. One of the last people to visit the infirmary was a woman whose three children had gone to the cinema as a special treat. "Shrinkingly, as it came to her turn," narrates a sympathetic eyewitness, "she advanced to the door, with a nurse holding her hand, a prayer in her eyes. Her lips moved and tears streamed down her face. Slowly she passed through the door; then the huddled crowds heard a loud sob and—silence. The mother's worst fears had been realised. The whole of her family of three children was wiped out."

There was little to be said which could bring comfort to the bereaved parents. One fact there was, however, from which they must have drawn some meed of consolation. The dead children, almost without exception, presented composed and peaceful features inclining to a smile, and only in two or three cases were there any marks of scratches or contusions. Dr. Andrew Gray was therefore able to assure the parents that death had come to their little ones both painlessly and with merciful swiftness. Actually, 59 of the children brought into the hospital were already dead on arrival; 10 more died the same day, and one the day after. In 68 cases out of the 70 the cause of death was established as having been asphyxiation due to crushing. But pitiful indeed was the condition of the survivors. All the rescued children were in a deplorable state of hysteria, and some—so terrible had been their experience—were even on the verge of insanity.

The Glen Cinema, as has already been mentioned, was largely patronised by the most impoverished classes; indeed, many of the parents were so desperately poor that they could not raise the necessary funds to bury their children. The question of relief-measures was therefore a pressing one, and on the very night of the tragedy the Paisley magistrates held an emergency meeting to consider ways and means.

The relief fund was headed by a grant of 1,000 guineas from the Town Council, members of which paid a personal visit to every bereaved home to tender their sympathy and to make an offer of paying the funeral expenses. £1,000 was contributed to the fund by Mr. James V. Bryson, the managing director of the Universal Pictures Corporation, and another £1,000 by Mr. Edward Cochran, the proprietor of a big drapery store in Paisley, and it is gratifying to be able to add that the response of the public at large was generous in the extreme, the receipts reaching a total of £4,000 by January 6th.

The funerals of some fifty of the children took place on the 3rd, all business premises closing and all flags being flown at half-mast. Among the first funerals held was that of Robert Wingate, who had been a keen member of the local Boy's Brigade. Upon the plain white coffin lay the poor little fellow's cap and belt, and the procession was led by the pipe-band of the Brigade, playing the haunting, dirgelike "Flowers o' the Forest". References to the tragedy were made in all the churches on the Sunday following, and at Sherwood Church special mention was made of the heroism of James Johnstone, the boy whose self-sacrificing act has been described above.

Early on January 2nd, meanwhile, the scene of the disaster had been carefully examined by Major T. H. Crozier, Chief Inspector of Explosives to the Home Office, accompanied by Firemaster Dyer, of the London Fire Brigade, and two officials from the Surveyor's Department of the London County Council. His report expressed the opinion that the circumstances leading directly to the catastrophe had been the position of the rewinding-room, the blocking of the exits, the lack of attendants, and, lastly, overcrowding. The panic, it was pointed out, had arisen owing to the smoke from the rewinding-room entering the auditorium; but had there been more attendants, it was possible that the children could to some extent have been quietened, and it was certain that the great loss of life would not have ensued had the back gate only been left open.

To determine how the used film had come to catch alight was naturally a task of extreme difficulty. Rosie, the operator, was emphatic in his denials that there had been any

smoking in the operating-room that day, and McVay, the assistant, made a statement that there had been an accumulator standing in the box into which he put the film, and that he had placed the film against the accumulator, upon which smoke had immediately begun to come from it. Presumably he had set the film against that part of the accumulator which would cause a short circuit. In this connection, Major Crozier's report made it clear that "Smoking Prohibited" notices were duly posted in the operating portion of the cinema, as stipulated by the regulations. On the other hand, although it was impossible to say definitely that smoking had taken place in the enclosure, cigarette-ends of recent origin and spent matches were found on the floor, and in the rewinding-room there were an empty cigarette carton and an empty matchbox, while the top wooden shelf displayed the unmistakable mark left behind by a burning cigarette.

As early as January 2nd, however—the very day of the Home Office expert's visit—there had been a dramatic development, no less an event than the arrest of Mr. Charles Dorward, the manager of the cinema, whom the Paisley police, acting on a sheriff's warrant, apprehended on a charge of culpable homicide. Next day he appeared at the Sheriff's Court; application for bail was refused, and the accused man was then committed to prison pending consultation with the Crown authorities, though later on he was in point of fact released on bail in the sum of £750.

Dorward's trial opened at Edinburgh on April 29th, the Lord Advocate, Mr. Craigie Aitchison, K.C., and Mr. John Cameron appearing for the Crown, while the defence lay in the hands of Mr. Macgregor Mitchell and Mr. J. L. Clyde. The principal contentions of the prosecution were concerned with the iron trellis-gate behind which so large a number of the little victims had perished. It was alleged that Dorward, although he had more than once received warnings in this regard, had failed in his duty in that he kept this gate closed and padlocked on the fatal afternoon. The essence of the indictment, that is to say, was that it had been the manager's bounden duty to keep the exits open during the performance, and more particularly so because there were only two such exits, but that this had not been done.

As against this contention, it was argued on Dorward's behalf that the law of Scotland did not recognise vicarious responsibility ; to be guilty of a crime, a man must commit it himself, and it could not be maintained that any action of Dorward's had been the direct cause of the children's deaths. The Lord Advocate, however, found himself quite unable to regard this presentation of the matter with any sympathy. Evidently taking the view that acts of omission can be considered as real acts no less than those of commission, he replied that "it would be a curious thing if a cinema manager could escape responsibility by saying he was not responsible for the fire which gave rise to a panic".

The bulk of the argumentation, however, revolved around the central point of whether or not the trellis-gate at the foot of the balcony stairs had actually been fastened during the performance ; and, if so, whether the responsibility for this did or did not rest upon Dorward. The first evidence bearing upon this question was that of James Glen, an attendant at the cinema, who stated that he had been engaged in "packing" the children when he first observed the smoke. *Knowing that the iron gate at the back was always kept padlocked during matinées*, he had rushed round to try and get it open. A policeman had struck the padlock with his baton, and several men had then, by dint of violent tugging, succeeded in opening the gate.

Mr. James Graham, the proprietor of the cinema, then attested that on two occasions he had found the trellis gate shut during matinées. He had then reprimanded Dorward, whose excuse had been that "they were slipping in at the back". He had replied that he did not care if the whole of Paisley slipped in : the gates must be kept open. Describing the afternoon of the tragedy, he narrated how he had received an urgent telephone message from Dorward to the effect that something terrible had happened, and that a lot of children had been injured. He had asked the manager whether the gates had been open, and the answer had been in the affirmative. He had then said to Dorward, "Do you say that on your soul and conscience ?" and again the other had replied, "Yes."

It was mentioned in the police evidence, however, that

Dorward, when arrested, had made a statement that at a quarter past one on the afternoon of the *matinée* he himself had gone down and pushed the trellis-gate open, and his allegation received support from Isa Muir, the cinema chocolate-girl, when it came to her turn to give evidence. This girl swore that the manager indubitably *had* descended the steps and pushed back the gate. How it had come to be shut again she naturally could not say, but she thought it might very possibly have been reclosed by two boys whom she had observed peeping through a glass panel above the back door soon after the performance started.

It would seem that the court based its eventual decision upon the consideration—an eminently just one, it must be agreed—that Dorward's previous failures to obey the proprietor's instructions with regard to the trellis-gate were entirely irrelevant: the one salient question to be decided was whether on this particular occasion he could be held responsible for that gate having been fastened, and thus, by a natural sequence, for the deaths of the unfortunate children. And upon this all-important point the evidence was contradictory. On the one hand, there was the witness who had testified that the gate always was kept padlocked during *matinées*, and that he had seen a policeman striking the padlock with his baton; on the other hand, there was the chocolate-girl who declared that Dorward, far from locking the gate, had with his own hands pushed it open. It was clearly an admissible possibility that the gate had indeed been reclosed by some unauthorised person. True, it had been bent and twisted in the effort to wrench it open; but was it not at least credible that the crowd, horrified out of its reasoning powers by the gruesome spectacle behind the trellis, had made a mistake and jumped to the natural but erroneous conclusion that the gate was locked?

Such must have been the court's line of argument. At all events, a verdict of "Not guilty" was returned, and so fell the curtain upon one of the grimmest dramas that have startled the United Kingdom in recent times.

THE FRENCH FLOODS OF '75

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IN order to grasp the frightful extent and destructiveness of the inundations which overwhelmed a large portion of southern France in 1875, it is necessary first to recall to mind the main physical features of the area involved.

The Garonne basin is bordered on the east by the Bigorre range and the watershed of the Lozère, on the south by the Pyrenees, and on the west by the Bay of Biscay. The River Garonne takes its source in Spanish territory, between the peaks of Maladetta and Mont Vallier, and at first runs in a north-westerly direction. The Bigorre range, however, makes a sudden bend to the north-east as far as Toulouse, where it resumes its course to the north-west. At Toulouse, and as far below it as Bordeaux, the river flows through a plain and has a shallow bed. Being not infrequently too low to be navigated, it has a canal running alongside it for a distance of about 120 miles. Below Moissac it is joined by the Tarn, and lower down by the Gers. A little beyond Bordeaux it joins the Dordogne, and at this point it takes the name of the Gironde. Owing to the shallowness of the river-bed at and around Toulouse, the region has always been particularly liable to become flooded, and very serious inundations occurred there in 1815, 1835, and 1855. It is remarkable that these floods should have taken place at intervals of exactly 20 years; the fact apparently argued a set periodicity, and when 1875 brought a recurrence the theory seemed beyond dispute, however difficult of explanation.

On Tuesday, June 22nd, 1875, following a spell of uninterrupted heavy rains, the Garonne was seen to be abnormally high, but the position did not excite any great anxiety. It was anticipated that a certain amount of damage might be done, such as usually follows the melting

of the snow in winter-time, but nobody seems to have thought it worth while to take any special precautions.

Next day, however, the river had become a raging torrent and was still rising with almost incredible swiftness. Then, indeed, the authorities set to work with desperate energy to hem in the waters, but already it was too late. The flood poured relentlessly into all the low-lying quarters of Toulouse. By 2 p.m. 20 houses had been swept away, two arches of one of the bridges had been destroyed, and the floating baths and wash-houses had all been carried from their moorings and smashed to matchwood against the sides of the riverside houses. Three hours later the situation had become appalling. Two bridges, that of St. Pierre, leading to the arsenal, and the suspension bridge of St. Michael, had been carried away, and the bridge of Empalot was reported to be in serious danger. The hospitals of Maison Dieu and La Grave had been evacuated, the railway service was at a standstill on the line between Foix and Montrejeau, there were rumours of wholesale drownings. Worst of all, the water had now risen over the parapets of the populous quarter of St. Cyprien; by 6 p.m. the district was flooded to a depth of 10 feet.

The Faubourg St. Cyprien might have been described as a town in itself; it was to the higher-lying part of Toulouse very much what the Surrey side of the Thames is to the Middlesex shores. It contained at that period some 25,000 inhabitants, the majority of whom were of the working classes, though on the outskirts were a large number of villas belonging to wealthier people. The quarter was notably picturesque, being traversed by fine avenues of trees, and around it stretched a beautiful and rich countryside of market gardens and cornfields.

Into this fair quarter swept the flood-water with irresistible force. The tree-lined streets became boiling torrents, house after house tottered and collapsed, often before the wretched inmates could make even an attempt to save themselves. Boats were hastily got out for their rescue, but with such awful violence did the waters surge through the town that several craft were carried away like corks and either dashed to pieces or swamped. Above a deep pool where had been the gardens of the Civil Hospital, two boats

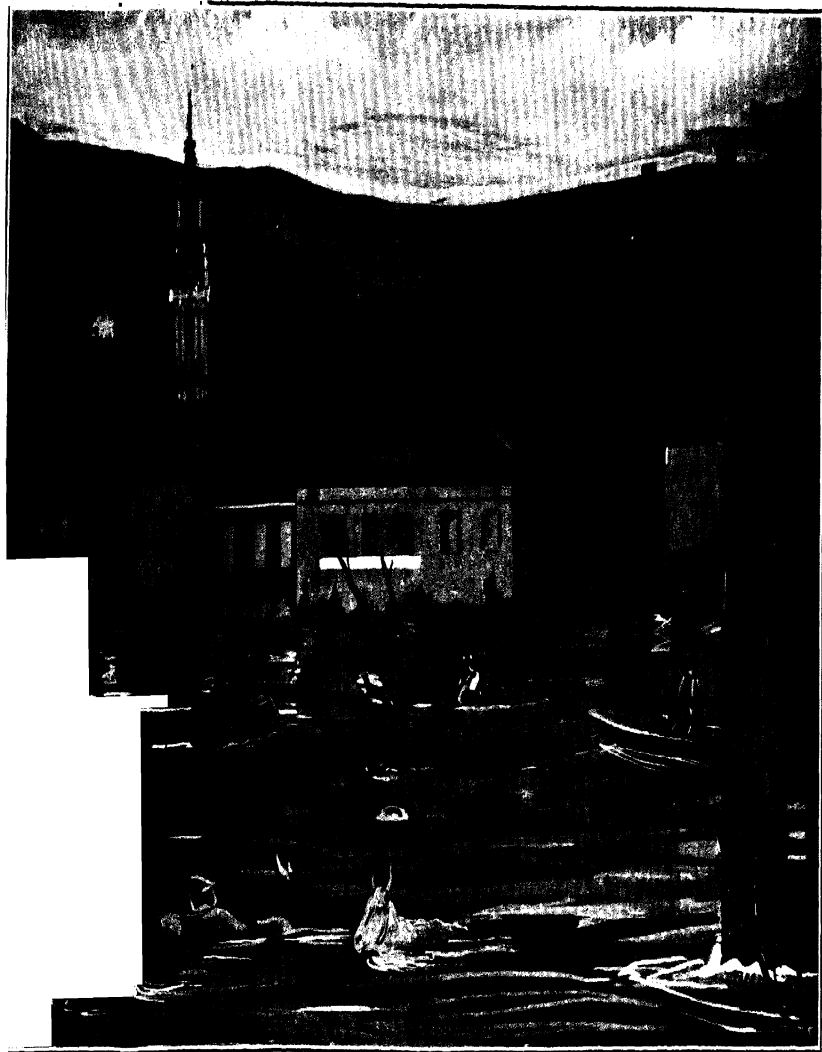
manned by eight soldiers were flung against each other and sank immediately ; out of 30 persons on board, only one woman was saved. Numbers of people attempted to escape on horseback, but these too were whirled away in the seething tide and met their death. By nightfall the whole of the Faubourg St. Cyprien was entirely cut off from the rest of the town, the three connecting bridges having all been destroyed. Throughout the night the air was filled with the dull, menacing roar of the flood, punctuated by the crashes of falling houses and the piercing cries of the victims. To add to the horror, the water had invaded the gas pipes, so that the stricken faubourg was plunged in complete darkness. . .

But we must at this juncture leave Toulouse for a few minutes to see how other parts of France were faring. The reports from Normandy stated that "the rain had done much good, and had been very beneficial to the grass crops". Such news must have come with a tang of bitter irony to the folk of the Garonne, for from every region of the great basin were received tales of disaster, each one of which seemed more appalling than the last. At Montauban all the crops on the banks of the Garonne and the Tarn had been annihilated ; the former river was in some places four miles wide. Auch was flooded out by the swollen Gers, and if the rain continued for another 24 hours the wheat would all be done for. At Tarbes the seven-arched bridge over the Adour had been carried away. The railway service had been stopped at Pierrefitte, and accidents caused by the floods had occurred at Tournay and Bagnères. The lines connecting Toulouse with Foix and Bayonne were under water ; only the Chemin de Fer du Midi still afforded communication with the rest of France. At Fenouillet, a village some six kilometres distant from Toulouse, only three houses out of 400 were left standing, while several other villages in the neighbourhood were completely submerged. Bridges and cottages had been wiped out of existence at Bagnères de Bigorre. The countryside at Cérons, 30 kilometres from Bordeaux, was one vast lake, with the water up to the first-floor windows of the houses ; everything there had been carried away by the force of the current ; carts, furniture, tree-trunks and the carcasses of drowned animals were whirling past in unbroken procession. . .

There was no end to the stories of abomination and desolation. The villages of La Bastide and Besplas had been obliterated. At Mazères twelve houses had disappeared. Throughout Tarn-et-Garonne and the Upper and Lower Pyrenees property was destroyed wholesale. The river had not overflowed at Bordeaux, but it was choked with trees, hay, bodies of men and beasts, and other flotsam ; a cradle containing a living infant had come floating down, none could say whence. In the valley of the Gers the waters had reached a height unprecedented since 1825. At Muret the suspension bridge was wrecked and many houses destroyed. Roques and Pinsaguel, two villages near Muret, were in ruins. At Moulis, in the Tarn-et-Garonne, the church had collapsed, while at Golfech only the church and four houses were left standing.

The ancient town of Agen was suddenly flooded from two different directions at once, almost in less time than it takes to tell. The majority of the wretched inhabitants spent the night of June 24th clinging to precarious positions on the roofs of their tottering homes. One of the causes of this abrupt inundation, it appears, was the bursting of the railway embankment near Pont St. Pierre de Gaubert. The force with which the water rushed in was illustrated by the fact that huge stones from the bed of the river were deposited in the very centre of the town. "The inundation," one Agenois was heard to say, "is, like the plagues of Egypt, a scourge for our sins." But from this Agen drama emerged a story of great heroism. Lieutenant Peyrolle, of the 20th Regiment of the Line, a sailor named Auriat, and a Mons. Grousset travelled in a boat from house to house for three days on end, conveying provisions and other relief to the sufferers, regardless of the rapid current and the constant danger from collapsing houses.

At Verdun practically the whole village of 500 houses was completely destroyed in five minutes by an avalanche of water, mud and boulders, caused mainly through the melting of the snow by sudden heat. The inhabitants had dammed a small stream on the mountain above the village. Swelled by rain and melted snow, this suddenly burst its bounds and discharged over the precipice a fearful torrent, which descended accompanied by a



THE FRENCH FLOODS OF '75

"The waters had reached a height unprecedented since 1825."

whirlwind. Three houses alone were left standing. The rest of the village was reduced to a mere confused heap of mud moreand ruins, beneath which lay 100 human beings and than five times as many cattle and other animals.

Castelsarrsin was caught while it slept, and an immense pile of tumbled masonry was all that was left to represent what had been four hundred homes. There was a man in this town who managed to rescue his fiancée from the flood and to climb into a tree with her in his arms. All night he held her there, but just as dawn broke over the dismal waste of waters his numbed arms released their clasp and the poor girl disappeared for ever. From his precarious post in the tree this man witnessed every phase of another family's tragedy. A baker, finding escape cut off on every side, improvised a boat from a washtub, and in this he put his wife with their twin babies lashed round her neck. Then, having set the frail craft adrift, he himself climbed up on the roof of the house. For a little while it looked as though the woman and the little ones might win to safety. But then the raging torrent whirled the tub against a tree and it was upset. The frantic mother clung to an overhanging branch, making desperate efforts to pull herself up on to it. In vain : her failing strength was insufficient for the task. At last, feeling the branch about to give way, she untied the twins from her neck and attached them to the wash-tub. Then she made the sign of the Cross, let go her hold of the branch, and went down. . . .

At Toulouse, meanwhile, the whole population of the undamaged portion of the town was in the streets, all classes vying with one another in their efforts to rescue the trapped inhabitants of the Faubourg St. Cyprien. The place presented a pitiful spectacle. Between 5,000 and 6,000 poor creatures, half-naked, battered and benumbed, were conducted to the military hospital, some on foot, some in carriages or litters. They appeared utterly apathetic, stunned by the magnitude of the calamity that had overwhelmed them and their homes.

However, the floods were now definitely abating ; indeed, though above and below Toulouse the water stretched in every direction like some gigantic lake with house-roofs and tree-tops for islands, and strewn with the bodies of

human beings and animals and articles of furniture, in St. Cyprien it had fallen six feet by the afternoon of Thursday, the 24th. Now, at last, it was possible to form an approximate estimate of the havoc done, to rescue the wretched beings who still clung to the remains of their homes, and to make a start with the melancholy labour of collecting the dead.

"No more extraordinary contrast could be imagined," wrote an eyewitness, "than that now between the north and south sides of the river at Toulouse. The former wears its usual aspect, but the latter resembles a place which has been bombarded. . . . The destruction is unprecedented ; nearly all the houses in the Faubourg St. Cyprien are totally demolished, and only one bridge has been left undamaged. . . . It is now believed that some hundreds of people are drowned and 20,000 destitute. . . . All the granaries on the bank of the river are destroyed. Indeed, the entire quarter may be said to have disappeared, for all the houses still standing are damaged or tottering. The older houses, on account of the greater solidity of their walls, offered the greatest resistance to the flood, and those supported by the fortifications were not carried away. It is said that 600 have been swept away in Toulouse itself and 2,000 in the environs."

And on the day following : "St. Cyprien is now a town of ruins. The Garonne is by this time running in its natural bed, but all over the inundated quarter are pools of water and rank river mud. Trees are uprooted, gardens are mere swamps, and streets are half-dried watercourses. In some places the houses are heaps of rubbish, in others the walls have been left standing, with pictures or articles of attire still hanging on them.

"Everywhere gangs of soldiers are at work demolishing walls, collecting furniture, and making the roads passable, while the owners of the ruins are, some helping with a sort of resolute fury, others sitting on beds or mattresses gazing vaguely at the rubbish which represents their homes. Some of the more energetic families are picknicking and cooking their meals in the desolate gardens, the women bright, if not cheerful, the children playing about as if nothing had happened. The despondent are just the contrary, the

women sitting with their faces buried in their hands and the boys and girls lying huddled together among the broken beams and heaps of plaster. The roadsides are lined with all kinds of articles, from four-poster bedsteads down to blankets and bonnets, and in several places small shopkeepers are trying to dry their stock-in-trade in the sun. . . . We are having hot weather ; the stink of the refuse and the undiscovered bodies is scarcely tolerable."

Beyond the town barriers were to be seen great stretches of desolate swamp where before had been cornfields and vineyards, dotted with pathetic little piles of gaily painted boards which had once formed portions of summer-houses. As for the town wall itself, a solid line of concrete, in one place it was thrown down flat ; while a little farther on two huge beams 30 feet or more in length had completely barred one of the gateways. Nothing, however, demonstrated the giant strength of the flood so clearly as did the suspension bridge. Nearly a half of this great and heavy structure had been firmly and securely laid by the water on the bank, where it now remained looking exactly like a landing-stage. It provided a curious commentary upon the value of modern engineering, for all its advances upon earlier methods, that the one bridge left standing in Toulouse was the ancient stone one of St. Pierre.

In the search for the living and the dead the troops displayed the greatest energy and courage, and many, too, were the stories of gallantry narrated of civilians. Monsieur Guyonnet, a butcher, personally saved no less than 18 lives. Sergeant Escarfail, of the 143rd Regiment, aided by two artillerymen, rescued eight persons. Monsieur Chalons, an artist, and his two children, were saved from a fallen house, where they had been almost miraculously preserved amid a perfect avalanche of bricks and beams.

As the work progressed, so grew the tale of blackest tragedy or providential escape. By midnight of the 24th about 100 corpses had been discovered in such houses as were still standing. These were buried as soon as they had been photographed by their relatives or friends. One of these victims was Monsieur Wohlfart, a retired major, who lost his life through the collapse of the walls of a house which he had entered in order to save two children. Another

who perished in the attempt to save others was the Marquis d'Hautpoul ; when he was buried on the 27th the funeral procession was followed by thousands. In many cases bodies were discovered huddled in alleyways or corners of gardens. Five victims composing one family were found in a first-floor room, all locked together in an embrace.

"Those who had escaped," we are told by the observer already quoted, "were to be seen stationed at the entrances of their ruined tenements and giving information as to their fellow occupiers. . . . In the belfry of St. Nicholas' Church 60 persons took refuge. The flood reached the altar table, and not far off a clerical student was searching all day among the ruins of a large house for his parents and sister, listening intently for any sound of life."

Among the buildings inundated was the new Carmelite Church ; a woman who chanced to be confessing there was drowned, but the confessor made his escape. Those rescued on the Thursday included the girls of a convent school. They had passed a truly dreadful night, ascending from storey to storey as the flood rose, and "passing the time in prayer, expecting every moment to be their last". In one house were found the bodies of four women, each with an infant in her arms. In another were discovered 10 victims in one room, two of whom were still breathing and received the last Sacrament before expiring. One woman's body was found by her dog.

But to these grim details there is no end. Indeed, dead were still being discovered when July was well on its way. On July 4th were found 44 corpses crowded together in one house, the poor victims having evidently imagined it to be a building specially solid and secure. At that date, or thereabouts, the Government assessed the number of lives lost at 3,000. Such estimates, however, could only be guesswork. The loss of life would never be known precisely, for the Garonne had carried away an incomputable number of bodies, while conversely many had been recovered at Toulouse wearing the costumes of districts 20 leagues distant.

Toulouse and its surrounding countryside, after the subsidence of the floods, were just a noisome slough that exhaled an unbearable stench, worse than ever now beneath

a burning sun. Mr. Arthur Arnold thus recorded his impressions in a letter to *The Times*: "After a battle in summer fields, when you see the dead lying amid waving corn or in flowery grass, the aspect of the eternal life of Nature redeems the scene from hopelessness; but when, beneath the muddy ooze, which has killed all and which covers all, you see the hardly recognisable forms of men and women, and around the blighted fruits of the earth and the useless appliances of home and of industry protruding from the same pall of ruin, the spectacle is one which has no parallel."

On the afternoon of the Thursday the clergy of St. Nicholas went in procession to the Église de la Daurade to supplicate the Virgin for mercy, and services of intercession were going on all day in most of the other churches. But in the meantime there was practical work of relief to hand for everyone capable of rendering assistance. Toulouse was crowded with people clamouring frantically for news of relatives and friends and property; this rendered the food position more acute than before, and soon it was at the doors of the Mairie that the clamour was being raised—a clamour, now, for food and shelter. To meet these demands was indeed a problem; the railway between Toulouse and Bordeaux having been cut at more than a dozen points by the inundation, there was only one train making the journey to Toulouse, and it took 16 hours to get there. By the 26th, however, trains were coming in regularly with money and provisions, and on Sunday, the 27th, there at last arrived a supply of drinking water, of which the stricken town had had none since the previous Wednesday. Indeed, water for drinking purposes was still lamentably scarce as late as the beginning of July.

Swift and sweeping measures had to be taken to finance relief on so large a scale as the disaster made necessary. On the 23rd the Assembly unanimously voted 100,000 francs as a first contribution, but it was immediately realised that such a sum would not go far, and five days later the grant was increased to 2,000,000 francs. Even this amount, however, proved inadequate. The material loss involved by the floods was anything from £12,000,000 to £15,000,000; thousands of families had been abruptly deprived of their entire livelihood and debarred from a multitude of resources

which the most lavish charity could not replace. Madame MacMahon, the President's wife, a woman ever renowned for her philanthropic activities, opened a subscription list which she herself headed with a gift of 5,000 francs, and the first day's contributions to which totalled 64,000 francs. By June 29th the subscriptions to this list had reached 200,000 francs, Sir Richard Wallace having contributed 25,000 francs, and the Bank of France and the French Southern Railway 50,000 francs apiece. July 2nd saw the fund in receipt of 605,000 francs ; two days later it totalled, together with the subscriptions received at the public treasuries, 1,362,000 francs. All the big Parisian newspapers opened relief funds, and the response to the various appeals was wonderfully generous, from France and from foreign lands alike. Rothschild Brothers gave 30,000 francs, Madame Heine gave 25,000 francs. The Prince Imperial subscribed 6,000 francs, and the Empress Eugénie 4,000 francs ; 35,000 francs were produced by a special benefit performance at the Paris Opera. A Mansion House Fund opened by the Lord Mayor of London received £26,497, and £213 were subscribed by the men of the Metropolitan Police Force, while a tremendous impetus to assist was given by a suggestion made by Messrs. Thos. Cook & Sons to the effect that the majority of the tourists who habitually travelled on the Continent would probably be glad to subscribe if proper facilities were given, which facilities they themselves proceeded to provide by instructing all their agents to receive donations. In short the response of the world to France's appeal was nothing short of magnificent. When it is stated that by the middle of September the total contributions in hand amounted to no less than 24,000,000 francs, further comment is superfluous.

On June 25th Marshal MacMahon, the President, accompanied by General de Cissey, Minister of War, Monsieur Buffet, and Colonels D'Absac and de Vaugrelon, left Paris to make a tour of inspection through the devastated area, and it is sad to have to record that even in such a time of national disaster the French political journalists showed themselves incapable of refraining from making capital out of this very natural proceeding. One of the purposes of Marshal MacMahon's journey was to bring encouragement

to the destitute in out-of-the-way districts with the news that the Assembly had voted funds for their relief. The Bonapartists, however, spread a rumour that the Marshal would distribute money in public, as Napoleon III had done on the occasion of the Lyons inundations in 1855, and when this failed to materialise there naturally was disappointment, which the Bonapartists sedulously fanned, drawing invidious comparisons between the Marshal's unpretentious progress in a carriage and mere promises of future assistance and the spectacular figure of Napoleon mounted on horseback in mid-current as he distributed alms.

Even the subscriptions for the relief of the sufferers were made the subject of vitriolic polemics by the partisan newspapers. The *République Française*, for example, remarked that a subscription made by the Bonapartists might have been considered a commencement of restitution. To which *Le Pays*, which was a Bonapartist paper, retorted that the 1,000 francs contributed to the relief funds by the *République Française* constituted an insufficient restitution, that journal having been founded by means of money stolen from soldiers perishing of hunger and being now edited by bandits !

The following extract, taken from an account given by one who accompanied Marshal MacMahon in his tour, throws an interesting sidelight upon French mentality :

"At St. Jorj nothing remained but a few shaky walls, and eighty people had perished among the ruins. All the population turned out to meet the Marshal ; some of the women had on regimental trousers, and some of the men appeared in petticoats. You imagine, perhaps, that this population has given itself up to despair. Ah yes ! Everyone is shouting and laughing, and would even sing were they not restrained by respect for the authorities. The arrival of the Marshal is for them a grand *fête*, and they hardly remember the inundation. An old peasant said to me, 'How unfortunate it is that we should have forgotten to hang out flags !' . . . The Marshal is quite at home in the midst of the peasants, and I saw the tears stream down his cheeks as a poor woman related how she had lost her mother and her child. . . ."

And here is a curious description of Toulouse itself

given by the same writer : "At 10 o'clock I walked through the streets of Toulouse, and, by my faith, the town is right gay. The desolation of yesterday has passed away, and the people, whose faces were several yards long yesterday, are going to dance at the balls this evening. All the work of clearing away the ruins is left to the soldiers, the people showing all the resignation and fatalism of Mahomedans."

In the course of his tour Marshal MacMahon visited the village of Verdun, the fate of which has been narrated. It had been decided to make no attempt to excavate the village ; the inhabitants and their homes were to be left as they were buried on that terrible night of June 23rd. The Marshal and those with him were horrified at the mute evidence they saw of the flood's savage force. In one place an uprooted tree had completely sliced off the top of one of the few remaining cottages. "One of the surviving inhabitants was brought to the Marshal. His open mouth and vacant look showed that his reason was affected. He had been miraculously saved from the mill, where seven others had been crushed to death. Even when the pitying head of the State gave him 1,000 francs, his face gave no sign of animation."

In a calamity so immense as that of the Toulouse floods we ought to be grateful for any gleam of humour. Such a gleam was provided by the clerical newspapers in their speculations as to the causes of the inundation. The Municipal Council of Toulouse, it appeared, had recently refused to erect a statue to "the glorious and miraculous shepherdess of Pibrac", and one of the councillors had expressed a preference for a fountain. Evidently still smarting under this episode, the *Gazette de Nîmes* remarked : "God has fulfilled the wish of these honourable councillors and sent a fountain to the capital of Languedoc which they little expected."

THE 1906 VESUVIUS ERUPTION

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THE Vesuvian villages lie in an irregular circle around the lowering monster from which they take their name, a circle the circumference of which is traced by the railway. Starting in a clockwise direction from Naples, the villages are Pontecelli, Massa, St. Anastasia, Somma Vesuviana, Ottajano, San Giuseppe, Terziguaro, Bosco Trecase, Torre del Greco, Herculaneum, Resina, Portici, and thus back to Naples, while a little further along the coast beyond Bosco Trecase—slightly off the circle, that is to say—lie Torre Annunziata and Pompeii.

Grim indeed is the record of this area. The first recorded eruption of Vesuvius, which we are told occurred after a long period of quiescence, was the appalling outburst of 79 A.D., when Pompeii and Herculaneum were destroyed and 200,000 lives lost. Violent eruptions took place in 472 and 512. In 1631 came one which annihilated the forests on the slopes of the mountain, and in 1794 there poured down to the sea a lava stream 30 feet in height, which overwhelmed Torre del Greco in its course. The villages of Massa and San Sebastiano were flooded with boiling water in 1822. A lava flow in 1855 devastated a large section of country. Torre del Greco was again severely damaged by lava in 1861. In an eruption which occurred in 1872 22 tourists were killed by a sudden rush of lava and fragments of rock.

Some notion, then, of the magnitude of the disaster which smote this region in the year 1906 may be gathered from the circumstance that the flow of lava surpassed any that had taken place during the preceding two centuries. Moreover, it was perceived, afterwards, that the actual shape of Vesuvius had changed. The old cone, so familiar in pictures, was almost entirely gone, leaving a flattened ridge. The distance by which the cone had sunk was estimated by

Professor Mattucci at nearly 250 metres, while an English engineer named Moser who ascended to within 80 yards of the crater-edge while the eruption was in full blast found the crater 400 feet lower on the Resina side than had formerly been the case. Incidentally, this hero was struck by a storm of stones and ashes projected from a new vent which suddenly opened with a fearful uproar almost under his feet, and had to fly for his life. . . .

The tragedy of the disaster was heightened by the former wonderful fertility of the district, a mass of rich vineyards and market gardens. Here is a passage written by Sir Hall Caine, in which he describes this countryside as he saw it on the day before the beginning of the eruption :

"The day was fine, and the prospect from the slopes of the mountain was magnificent. Naples lay still in the broad plain below, the island of Capri glimmered like a grey ghost above the belt of haze which is the breath of the sea, and all the nearer landscape was fresh and sweet and lovely. The country people were working in their vineyards on either side of the electric line that goes up to the Pavilion" (i.e. Messrs. Thos. Cook & Son's funicular railway), "the girls singing in the gay notes of their kind, the young and old women carrying their bronze water-cans from the wells, the men delving in the red ground. It was impossible not to think of the long winter just passed, in which they had dug their ground and manured it, set up their framework of poles for the vines to climb upon, and cut and pruned the bare stems of the trees themselves. Their work was well-nigh done, and they had little more to do now than to wait while the warm sun of summer brought the beautiful fruit which was to find food and clothes and pay rent and taxes."

It was on January 10th that three streams of lava were seen to be pouring down Vesuvius on the side upon which was situated Cook's funicular railway. This phenomenon was assumed to have some connection with activity then being manifested by Etna, which was vomiting great quantities of ashes, presenting a magnificent spectacle against the shining white snow. Nor did the lava-flow at this early stage occasion any alarm ; the Neapolitans said jokingly that Vesuvius was only preparing to greet King Edward VII, who was about to pay a visit to Italy. However, the

volcano's hospitable demonstration was not without serious effect, for the lava considerably damaged the funicular and travelled as far as the lower station before coming to a standstill.

February brought further volcanic activity. A stream of lava formed on the south-western side of Vesuvius and presently divided into two branches. Two days later the lava had reached three places on the Vesuvian railway line, covering about 100 yards of line at each point, and appeared likely to cut it at a fourth point, while the funicular railway, the station of which was also threatened, had ceased to function. It was confidently asserted at this stage, however, that for the surrounding countryside there was no danger.

On the afternoon of March 28th matters suddenly assumed a more ominous aspect. A few earthquake shocks were experienced, and then, 100 yards or so from the upper station of the funicular, appeared a new crevice in the mountain side—a crevice later found to measure 450 feet across—from which a stream of lava poured forth, while wreaths of smoke bellied high into the air. Considerable activity, too, was observable in the principal crater.

This marked the beginning of really serious business. At 5 a.m. on April 4th a fresh lava stream made its appearance flowing in the direction of Pompeii, while numerous and violent explosions continued in the crater. Next day the manifestations had increased greatly in intensity, telegraphic communication with the Vesuvius Observatory was interrupted, the inhabitants of the small villages near the crater were fleeing for their lives, and Naples was strewn with cinders. The night that followed was a night of terror. Huge blocks of granite were hurled as far as the lower station of the funicular railway, and the new crater began to emit lava in a stream of rapidly increasing volume, which poured down over the vineyards belonging to Bosco Trecase and was already within three or four miles of that village itself.

On the night of April 6th not a soul in any of the Vesuvian villages dared to go to bed. A calm more ominous than the mountain's most hideous uproar overlay the region: a wall of lava 10 or more feet in height was known to be advancing steadily through the darkness, at any moment

the fiery torrent might burst upon one or other of the villages. And in the late hours it did sweep down upon Bosco Trecase, forcing the wretched inhabitants to fly for very life. By 6 a.m. the village was completely surrounded and the people had all evacuated their homes, compelled to leave most of their belongings behind on account of the dearth of transport. At 10 p.m. the lava-flow was once more at a standstill, but by that time some 10,000 folk from Bosco Trecase were seeking succour in Torre Annunziata—though the lava threatened to engulf that village also if it should start to move afresh—while vehicles of all descriptions were pouring into Naples with refugees from other parts of the danger zone.

Lieutenant Ciarrocchi, who was in command of a detachment of troops sent to clear the folk of Bosco Trecase out of their homes, thus describes the annihilation of the place: "All was quiet in the town, but after midnight terrific rumblings were heard, followed by a violent earthquake shock, which shattered the windows in the town. Then lava began flowing from Ciaramella, where a fresh fissure had opened up a few days ago. A wild panic ensued, people rushing into the streets and shrieking with terror. The Ciaramella crater was hurling forth masses of incandescent rock, and the torrent of fire was sweeping down at a terrific speed, flowing in two streams, one 200 yards broad moving towards the centre of the town. The people fled in terror towards Torre Annunziata, while soldiers visited every house to see that the inhabitants had escaped, rescuing two or three bedridden old people. Indescribable scenes of panic were witnessed. The town had hardly been evacuated when the river of fire invaded the houses, several of which were burned down, and soon Bosco Trecase seemed to be enveloped in flames." Actually, the whole of the inhabitants of Bosco Trecase were saved with the exception of one child.

The authorities took vigorous measures for the protection of the population. Every effort was made to remove the people from the most dangerous points on the coast; all available troops were sent into the stricken area for the preservation of order, the houses between Bosco Trecase and Torre Annunziata were all cleared of their tenants,

and carabineers were stationed along the roads to warn people against going near points of danger. All steamers in Naples harbour had steam up and were prepared for any eventuality. The Prefect of Naples, Cardinal Prisco, and the Duke and Duchess of Aosta left that morning to visit Bosco Trecase, and the Duchess, with Princess Louise of Holstein, actually mounted on foot as far as the edge of the lava stream.

The lava-flow, as stated above, had come to a standstill following the destruction of Bosco Trecase. This was but a deceptive lull, however, while the storm prepared to burst forth with aggravated fury. For that night, with appalling suddenness, the sides of the cone of Vesuvius subsided, and the streams of lava gained a terrible impetus. The electric phenomena of thunder and lightning which almost invariably accompany any great volcanic convulsion took on an awful violence, and the ejection of boulders and fiery scoriæ from the crater surpassed anything within living memory. "The threatening thunder of the volcano," wrote one eyewitness, "a thick pall of darkness torn by distant flashes of volcanic explosions, and a suffocating atmosphere made the district resemble an antechamber of hell."

Sir Hall Caine tells us that now "there came the change that seems to have been the beginning of the end. Great shafts of light, like flashes of sheet-lightning without thunder, played over the volcano for several hours, coming and going through the thick whorls of smoke that obscured the mountain. Whether these were flashes of flame from the mouth of the crater, or vast electric sparks created by the tumultuous maelstrom of stony fire within, it is for others to say; but the effect was terrible in its awful grandeur, with the sense it gave of nature's hidden forces and man's impotence." And another observer gives us the following graphic picture: "At sunset a veritable fountain of fire burst through the dense smoke from the crater on the summit and rose to a height of 1,500 feet, breaking into millions of fiery bombs and glowing particles, which rained down the slope of the cone and rolled impetuously to its base on all sides. They seemed to dart upwards from several vents within the crater. There was a heavy, continuous rolling round of terrible explosions, which never stopped for an instant. . . .

Spellbound, we stood in a country lane watching the sublime but fearful spectacle."

So fearful, indeed, were the manifestations of the burning mountain that 500 foreign residents hastily took tickets at Cook's to escape from Naples. But against this must be set the fact that at least an equal number of strangers came pouring into the city to witness the eruption. One steamer with about 1,000 passengers on board left Capri for Naples, but was unable to reach her destination, because when a mile or so off the coast the sightseers were almost suffocated by falling cinders and ashes. The vessel therefore anchored at Castellammare de Stabia, and from this point the passengers were able to watch the pyrotechnic display in comparative comfort.

It was reported early next morning that the Vesuvius Observatory had been destroyed, but happily this rumour proved to have no foundation. Indeed, on that very day was received from Professor Mattucci, the Director of the Observatory, the first of his reports upon the wild happenings up there at the seat of trouble. "The eruption of Vesuvius," he stated, "has assumed extraordinary proportions. Yesterday and last night the activity of the crater was terrific and ever increasing. The neighbourhood of the Observatory is completely covered with lava. Incandescent rocks are thrown up by the thousand to a height of 2,400 feet and even 3,000 feet, and fall back, forming a large cone. Another stream of lava has appeared from a fissure, the position of which is not well defined. The noise of the explosions and of the rocks striking together is deafening. The ground is shaken by strong and continuous seismic movements. The seismic instruments threaten to break, and it will probably be necessary to abandon the Observatory, which is very much exposed to electric shocks. The telegraph is interrupted, and it is believed that the funicular railway has been destroyed."

But that night held things more momentous than a mere spectacular display. The main courses taken by the lava were now four in number, namely, towards Ottajano on the north, to San Giuseppe and Terzigno on the east, past Bosco Trecase to Torre Annunziata on the south, and to Torre del Greco and past the Observatory on the west.



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Of these various fiery torrents, the most formidable was that which descended towards Torre Annunziata, those which deviated towards Torre del Greco and Terzigno being no more than its branches. In both the last-mentioned villages, however, panic reigned supreme, and the inhabitants can scarcely be blamed for their fear, groundless though it proved to be. At Torre Annunziata the lava stopped just short of the cemetery outside the town. But so desperate did the prospect seem at that hour that some of the people were only with the utmost difficulty prevented from disinterring their dead in order to remove them elsewhere. By the next day it seemed fairly certain that the danger of Torre Annunziata being engulfed had passed. But by that time no less than 30,000 out of its 32,000 inhabitants had abandoned the place and sought refuge in the surrounding country ; none moved in its desolate, empty streets, save a few troops and carabinieri placed on guard. "The panic," wrote a correspondent, "was intelligible enough. It is easy to say now that the inhabitants of Torre del Greco and Torre Annunziata would have suffered less misery had they remained in their homes ; but stouter hearts than theirs might well have been appalled by the terrors of the first and second nights and the continued plague of darkness."

In the early morning hours of the 8th, Ottajano, Poggio Marino and Somma Vesuviana were entirely abandoned, while the authorities found it no longer possible to keep troops in charge of Torre Annunziata. A country house in the neighbourhood of San Giovanni had been split in two by the lava, its walls falling right and left and burying two men and a child in their débris. At Ottajano the lava was flowing seven feet deep through the streets ; eight or ten houses and five churches had collapsed, among them the Church of San Michele, which had been built upon the site of the ancient Castor and Pollux temple and was famed for its art treasures. Here is the story of one of the Ottajano refugees : "We were sitting trembling in our house when we heard a terrible detonation from the mountain. We all rushed out of our house, fearing that it would collapse, and took refuge in a church opposite. Hardly had we entered this, when the roof collapsed with a crash, killing many people

on the spot. With the horrible cries of the unfortunate victims who had been buried alive ringing in our ears, we fled to the Church of San Lorenzo, lower down. As we entered it this also collapsed, and it seemed to us that God's Judgment Day had come. To add to our terror, the night was rendered hideous by the fearful, unceasing fusillade of stones and sand, and by the crash of falling roofs. We rushed out into the fields and improvised a rough shelter for ourselves with planks. Then a soldier galloped up and shouted to us that we were not safe even there. Once more we fled wildly into the plain, away from the horrible mountain."

It was in San Guiseppe, though, that the most serious loss of life was inflicted, and the Mayor of this place was afterwards suspended by the Prefect for having deserted his post and neglected to inform the authorities of the serious effects of the eruption upon the district under his charge. In the area lying between San Giuseppe and Ottajano the number of deaths was computed at more than 500, while about 200, it was estimated, were killed in the immediate neighbourhood of San Guiseppe, and 200 more in a church in the town. The priest had invited his flock to come in and hear a mass intended to avert the destruction of their homes. Soon after they had entered—at the very moment, indeed, when the priest was exposing to view the image of St. Anthony—the roof slowly descended upon the assembled worshippers. Those nearest the door escaped, but those farther away, mostly women and old people, were caught and either buried alive or crushed to death. The roof, long known to be unsafe, had succumbed to the added weight of ashes and other volcanic débris.

As far as the picturesque town of Portici, we are told, the country lay desolate under a shroud of sand. "Not a blossom can be seen on the withered trees, not a scrap of fodder on the ground for the cattle. . . . The appearance of the country around is indescribable. Every vestige of spring is gone. No green thing is visible ; nothing but grey dust, making one great grey Sahara under a grey fog for a sky." And amid this abomination and desolation lay what untold human tragedies ? "A school of boys on the eastern slopes," writes Sir Hall Caine, "had fled in fright, and days and

nights passed before some of them were traced and discovered. A girl lay two days in a hammock of ashes, and a young mother gave premature birth to a child under a buried arch of ashes, and lay alone with it for twenty-four hours before help arrived. Under the terror of such events and fear of the unknown future, crowds of the peasantry on their knees in the squalid squares of the Vesuvian villages held up the crucifix before the glowing lava to stay the oncoming flood, and when it stopped at the cemetery of Torre Annunziata they shouted praises to the Virgin for replying to their prayers."

Signor Denava, Under-Secretary of State for the Interior, and Signor Salandra, the Minister of Finance, travelled from Rome to Naples on the 8th to supervise the measures being taken by the Government. The following day the dynamic action of the volcano appeared to have diminished considerably, and the flow of lava in the Torre Annunziata direction had been practically stationary since the previous evening, except for a slight movement in the stream which branched off towards Pompeii. There were still intermittent explosions, however, and a perpetual subterranean rumbling, while occasional earthquake shocks were felt and the atmospheric conditions remained very unfavourable. A change of wind, moreover, had carried the dense cloud of ashes out to sea, stretching a thick veil between Naples and the coast-line of Castellammare and Sorrento.

Professor Mattucci and his brave staff, meanwhile, were still ensconced in their perilous eyrie, supplying reports on the behaviour of the volcano. On the evening of April 9th the Professor telegraphed as follows: "The explosive activity of Vesuvius, which was very great yesterday and was accompanied by very powerful electric discharges, diminished yesterday evening. During the night the expulsion of rocks ceased, but the emission of sand increased, completely enveloping me and forming a bed over ten centimetres deep, which carried desolation into this elevated region. Masses of sand gliding along the earth created complete darkness until 7 o'clock. Several blocks of stone broke windows of the Observatory. Last night the earthquake shocks were stronger and more frequent than yesterday, and displaced the seismic apparatus. Yesterday

afternoon and this morning torrents of sand fell. While I am telegraphing several balls of fire rise with loud rumbling from the enlarged craters and the new elevated crevasses." At about the same period it was reported by another scientific observer that "one of the most important features of the eruption is the continual collapse of the newly formed inner craters. When these fall in, great clouds of sand and dense columns of black smoke are thrown up, presenting a magnificent spectacle with the volcanic flames flickering across them. . . . Each explosion is followed by subterranean rumblings and by earthquake shocks which are distinctly felt by the villages at the foot of the mountain. . . The cone on the Pompeii side of Vesuvius has collapsed, and on the opposite side a new crater has opened at the base of the cone in the Atrio del Cavallo, and is vomiting lava and stones. The principal crater is in violent eruption. Explosions are unceasing, and a torrent of molten matter is thrown to a height of 1,500 feet."

The picture of the Professor and his staff calmly carrying on in the midst of such an inferno as described is one to awaken unqualified admiration. "The inhabitants of Ottajana or of Torre Annunziata," it was written, "fled for the same reasons as those of Pompeii, and the same agency worked destruction in their homes. . . . And history repeats itself, too, in the person of the faithful soldier who remained at his post of danger. Professor Mattucci and his guard of carabinieri worthily represent the Pompeian soldier who put his duty before his safety, though, most fortunately, they have escaped his fate."

It was on the morning of April 9th that King Victor Emmanuel and Queen Elena, ever to the fore in times of calamity and setting a shining example to their people,* arrived at Naples and at once set forth for the devastated area, despite the prevalence of most terrible conditions. Thick mist blotted out the horizon, hiding Vesuvius from view, carriages and wagons crowded with fugitives and their belongings continually blocked the roads. At San Giovanni the houses were invisible at a distance of 100 yards; when Ricci was reached the soldiers lighted the street lamps, but even this

*See *Great Disasters of the World*, pp. 248 and 256.

failed to illumine the dense obscurity. A violent gale whirled cinders and sand in all directions, making respiration difficult. The mud, which covered the roads to a depth of 8 inches, soon rendered further advance by the motor-cars impossible. The royal suite, unable any longer to face the difficulties of the journey, were here forced to a stop. Not so the King and Queen, however, who cheerfully continued on foot. Torre Annunziata they found utterly deserted, save for the troops guarding the town and carrying furniture away to a place of safety. They advanced as far as the limit reached by the lava-stream, remaining a full hour in the town, during which time they visited all the points at which havoc had been caused by the eruption. From Torre Annunziata they then went on to Ottajano, Santa Anastasia, Cercola and Somma Vesuviana, where the King conversed with the Mayors and addressed messages of encouragement to the villagers. Regardless of danger, the royal couple also traversed a considerable extent of the mountain railway, the upper part of which had been destroyed by a stream of lava only the previous night. Their visit to the stricken region unquestionably had an excellent effect in helping to allay a panic at a most critical period.

That night the Vesuvian pyrotechnics were, if possible, more superbly spectacular than ever. "Electric flashes incessantly pierced the sand-clouds, which at nightfall took wonderful tints of purple, green and violet. . . . The ejected matter was thrown to immense heights. An incandescent mass was hurled 3,000 feet into the air and fell to earth six miles away."

Naples, meanwhile, was crowded with thousands upon thousands of refugees, who had to be accommodated somehow in all the available buildings of the city. And hourly sailing-vessels were arriving in the harbour from one place or another along the coast, each bringing more fugitives, more mouths to be fed. By the evening of the 9th there were no less than 150,000 destitute refugees. The feeding arrangements were delegated to the military authorities, but the task was greater than their resources could cope with. Within a few days, however, there had arrived a French squadron, the U.S. cruiser *Lancaster*, and

H.M. cruiser *Leviathan*, from Corfu, flying the flag of Rear-Admiral the Hon. Hedworth Lambton, all of which vessels placed themselves at the disposal of the Prefect. And in the meantime the King and Queen, with a gift of 100,000 lire, had opened a relief fund which very quickly swelled to a total of half a million. William Le Queux addressed a fervent appeal for help to the British nation, pointing out that waves of Anglophobia, such as swept periodically over other nations, had never yet made an appearance in Italy.

The scenes in Naples throughout the period of the eruption were unparalleled within living memory. On April 9th, it is recorded, mud lay in the streets to a depth of 10 centimetres. The following day all was dry; ash rose in clouds of fine impalpable dust, thickly coating both houses and wayfarers; "it appears a grey city inhabited by grey ghosts". And that evening, after a short respite, the rain of volcanic débris began anew, so that soon Naples was more deeply smothered in ash than ever. "I can only compare the effect to a heavy snowstorm in London. The same difficulty of progression, the same curious muffling of all sound save the occasional scraping of shovels. Even voices seem to be muffled, but that may be due to the utter depression which now lies upon what is generally the noisiest of cities."

Through this grey, silent world moved pitiful little processions, composed mostly of half-distraught peasant women, carrying holy pictures, images of the saints, crosses and lighted candles. One such procession kept crying aloud: "Thou alone canst save Naples, blessed San Gennaro! Save us for the love of our children! Save us for the sake of the innocent souls! We promise that we will sin no more." At one point, just as a priest uttered his solemn blessing, a ray of sunshine momentarily penetrated the pall of sand, which was accepted by all present as a token that their prayers had been heard and answered. Members of another procession were seized with the idea of carrying an image of the Madonna of the Snows up the slopes of Vesuvius. Others, however, protested that she had shown herself a useless protector. Some beat their breasts and threatened the figure, and the eventful upshot was a free fight.

On the morning of the 10th a terrible calamity took

place. The roof of the market of Monte Oliveto at Naples, yielding to the weight of fallen cinders, suddenly fell in, killing 14 people and injuring 124 others. "The market place is a heap of ruins. The collapsed building is surrounded by thousands of despairing people, and women are tearing their hair, cursing and screaming out, 'My husband is there!' and 'Bring out my child!' and similar ejaculations. They are trying with their own hands to lift the beams imprisoning their friends and relations, and the groans of the wounded and their cries for help are so heartrending that the rescuers sob aloud at their work."

So overstrained were the nerves of the wretched refugees that it needed only the arrival of a fresh party of fugitives at any time to set afoot the wildest rumours of renewed activity on the part of the mountain. Indeed, it was well said by one correspondent that "the mixed credulity and superstition of the Neapolitans and the wild exaggerations of the newspapers combine to create scares which are half ludicrous and half pitiable. More than half the distress suffered by the population has been due to panic, often of a causeless kind. Without accusing the newspapers of wilful exaggeration, one may fairly say that they have made the most of the calamity, and that their anxiety to impress the Italian Government and the outer world has had a somewhat disastrous effect upon their own more impressionable people."

Moreover, there were other opportunists at work besides the newspapers. "Naples was a prey to one scare after another. Some, which had their source in the lowest quarters of the town, the haunts of the *mala vita*, were probably wantonly promoted in the hopes of robbery from empty houses. The scenes in the streets were often pitiful. On Wednesday morning a huge concourse of people, chiefly women and children, whose wailing cries were almost deafening, took possession of the Duomo and refused to return to their homes or be comforted until they were granted the procession of San Gennaro. The Cardinal-Archbishop yielded to their entreaties—it was impossible to do otherwise—and the holy image, carried by a few chanting priests and followed by thousands of weeping women bearing lighted candles, went out through the main

streets of the quarter. The image of San Vincenzo was also brought out and followed by a crowd hardly less numerous. Before every street shrine old women, their hair streaming in sign of mourning supplication, were lighting candles and invoking the aid of the saints. I feel that, in strict honesty, I ought to add that, although most of these pious demonstrations were genuine, some of the shrines were extemporised for the sake of levying *soldi* from the passers-by, and represented only a very sordid speculation."

April 10th witnessed a renewed eruption of lava, accompanied by a fresh downpour of ashes over the whole district surrounding the volcano. Next day the rain of cinders, gravel and hot sand continued; soon the abandoned Vesuvian villages were almost buried under the smothering weight of grey dust. The message received at this juncture from Professor Mattucci was: "I shall remain here as long as possible—as long as I have food. If my words could influence the population, they would be words of encouragement and sympathy, in full confidence that Vesuvius will shortly become calmer."

The professor's optimism, however, found no echo in the hearts of the lay populace. All that they could know was that the mountain still presented a picture of constant and terrible menace. The smoke rose to a height of 10,000 or 12,000 feet, shooting up in a long, thin column from the crater and spreading out into the familiar pine-tree shape as it ascended. "Where the smoke cloud thinned out," wrote a British naval officer, "it was a reddish yellow, but where most thick it had a deep purple tinge—not one homogeneous mass, but striated vertically or at an angle, according as the currents of air affected it, and from this cloud was falling silently but steadily a snow of fine powder." It is interesting to add that the younger Pliny has described how the forest-clad summit of what he and his contemporaries supposed to be an ordinary mountain suddenly emitted a cloud which rose from it *in the shape of a pine tree*.

Some notion of the magnitude of this eruption may be gleaned from the fact that on the afternoon of April 8th a shower of black dust "like iron filings" fell throughout Montenegro, covering the country to a depth of a millimetre.

And on the 11th "the attention of Parisians was attracted by the approach from the south-east of an immense cloud, which on reaching the capital seemed to resolve itself into a thick dry fog that enveloped everything for a time, vanishing after less than an hour towards the north-west". Monsieur Stanislas Meunier, the eminent geologist, managed to collect some dust from the mysterious cloud, and was able to certify it as identical with the composition ejected from Vesuvius in the eruption of 1872. "This," he declared, "is a fresh instance of the material collaboration of volcanic explosions in the constitution of the pulverulent substances spread broadcast over the globe by the winds. These substances play a manifest part in the renewal of vegetal soil and the nutrition of plants." Again, on April 13th, ashes from Vesuvius made their appearance in Switzerland. A yellow mist covered the town and lake of Zurich, ashes settled on the surface of the lake, there were remarkably fiery sunsets, and the range of Monte Rosa assumed a yellow-red colour. These phenomena are notable when we remind ourselves that Zurich is 530 miles distant from Vesuvius as the crow flies, and that between the two the great chain of the Alps rises to a height of from 12,000 to 15,000 feet.

But from now onwards the eruption began to diminish daily in violence. On the 12th the Circum-Vesuvian-Railway was functioning again as far as Ottajano, while detachments from the fire brigades of Rome, Florence and Leghorn were busily at work in the devastated villages, pulling down or propping dangerous structures, and the peasants began to dribble back to the remains of their homes. On the 15th terror was resuscitated by a sudden shower of ash at Ottajano, so heavy as to plunge the town in profound darkness. Then, on the 19th, a violent squall blew the smoke-plume on to the long-suffering Observatory, bearing with it a quantity of powder and asphyxiating gases and forcing the valiant staff to evacuate it at last. But despite these occurrences the great eruption was now, to all intents, over.

The tales of individual tragedy and heroism that emerged would themselves fill a book. The cook of the Hotel Eremo, high up on the mountain, remained there throughout the

eruption, resisting every attempt to persuade him to seek safety in the plain. At Ottajano a girl of 15 lived for five days buried in the ruins, and an old woman for three days. The manager of a branch of the Bank of Naples set out for Ottajano, where his brother lived. On the way he met a military wagon and peeped into it out of curiosity. Inside was his brother's dead body. To Ottajano, too, hastened Professor Giordano, of Naples University, intent on aiding his family. He found his brothers buried under débris, and his father, mad with terror, failed to recognise him. One poor woman gave birth to a child while going on board the French battleship *St. Bon.* . . .

There seems to be no reasonable doubt that the authorities, from first to last, tackled resolutely and intelligently the gigantic problems which confronted them. Yet such was the panic-stricken condition of the population that it constantly adopted a threatening attitude—so much so that at Naples the town hall and the piazza opposite the royal palace had to be guarded by cavalry. An illuminating example of the popular attitude occurred on April 9th, when a train full of refugees was delayed at San Giovanni for two hours or so. The indignant passengers poured out and smashed every window in the train. And when at last Naples was reached there was a further demonstration. The station-master's office was attacked, the windows broken, and the official himself wounded.

HELL LOOSE ON THE HOOGLY

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WITHIN the years 1843-1863, the trade of Calcutta more than trebled itself, the mean tonnage registered in its harbour in the firstnamed year having totalled only 258,695 tons, as compared with 821,485 tons at the later date. Yet, curious to relate, it had never been thought worth while to provide this large and still rapidly increasing mass of shipping with any adequate protection against the sudden and vicious storms for which the Hooghly River has always been notorious, despite the fact that in 1842 a terrible hurricane had taken enormous toll of life and property, and that then a committee of inquiry, after sitting for two whole years, had decided that nothing short of a judicious system of wet docks could serve to meet every potential emergency. Nothing had ever been done about the matter. There was in 1864 still not a single wet dock where ships could be berthed in safety, nor even accommodation of any sort for the general use of the shipping. The vessels simply lay moored in tiers along the river bank in a stream running from three to five, and often seven, miles per hour. All cargoes had to be loaded and unloaded by lighters, a tedious, dangerous and costly process. Moreover, the richly freighted merchantmen were exposed in this swift-flowing tidal river to "freshes", not infrequently accompanied by "bores" during the rainy season, so that often enough they broke adrift, both sustaining and inflicting serious damage. In short, this famous emporium was deplorably deficient in the means necessary to carry on an extensive sea-borne trade in safety, so that it was a foregone conclusion that any cyclone of unusual violence, coming at the close of the rains, when the river was high and the freshes swift, would find the shipping entirely at its mercy. And it is equally certain,

according to the views expressed by competent authorities after the occurrence of the frightful storm which convulsed the Hooghly on October 10th, 1864, that if only Calcutta had been properly equipped with wet docks, little damage or loss to shipping would have ensued beyond the dismantling of a few stray vessels unable to get into dock in time.

A circumstance which seemed to render the arrival of the great storm doubly fateful was that it coincided with the opening of the Doorga Poojah, the most important festival of the year; the city was full of light-hearted holiday-makers, though conversely large numbers of Government officials and native merchants were away from home, while scarcely an office was open except the Foreign Office. At their moorings in the river lay nearly 300 vessels. Nothing in the tranquil air of Calcutta could have hinted at impending tragedy, though perhaps there were signs in the heavens for such as had knowledge to read them. "On the evening of Tuesday, the 4th," declares one eyewitness, "the sun set amidst clouds of a deep red, with purple veins, as if bursting with passion," and later that night a high wind sprang up, accompanied by a fall of rain which still continued next morning. "The wind was then blowing fresh from the north-east. Gradually it changed round to the east, and was so fresh, and the rain so heavy, that I put off going to office in the hope that the weather might improve."

"In the hope that the weather might improve. . . ." There is something pathetically childish about that futile hope, in view of what was in store. For through the preceding night the storm had been travelling at a steady 10 miles per hour across the Bay of Bengal, shaping its remorseless course from the direction of the Andaman Islands towards the mainland—a giant cyclone some 100 to 120 miles in diameter, and increasing both in velocity and in radius as it curved off towards the east. Seventy miles from the pilot-station it flung itself with savage violence upon the British India Company's *Persia*, and the hapless vessel was like a toy in its grasp. She foundered almost at once, carrying with her every soul on board except two of the crew. Dr. Ford, Major M'Kellar, Capt.

Forsyth, Lieut. O'Rourke, Mrs. Brown and her infant child, Miss French, Mrs. Kelly, Capts. Salmon and Caulfield, Sergeant Davis, his wife and three children, and Messrs. F. F. Clough, J. C. Todd, H. Hyde, R. T. Savage, Moultrie, F. W. Brown, Kerridge, Schmidt and Dick—all these unfortunate people went to the bottom.

Five hours before reaching Calcutta, the cyclone was off the Sandheads, and then it was upon those dreary swamps, the Sunderbunds, where the Eastern Sunderbund grants were entirely destroyed. The *Martaban*, a vessel of Brokelbank's fleet, drove over the entire stretch of sands from Saugor Island to Cowkally, having 120 fathoms on one chain and 90 on the other, and the s.s. *Alexandra* had a similarly miraculous escape. Right over the village and station of Kedgerie swept the storm-wave, sweeping out of existence everything that came in its way except the post-office. The postmaster, his wife, sister-in-law, and all their children perished, and some notion of the force of the wave can be gained by the fact that a surveying vessel, the *Salween*, was lifted clean over the tops of the casuarina trees and flung down near the village. And while these scenes of terror raged so close at hand, Calcutta remained blissfully unconscious, or "hoped that the weather might improve". Yet need this have been the case? "It cannot be doubted," wrote a competent authority afterwards, "that if the Observatory at Calcutta had been properly managed we might have had fair warning of the cyclone. Now that it is all over, the native to whom this important department is entrusted states that the night before the storm he noticed that the barometer did not show the usual diurnal variations, but sank steadily. . . . It is a great mistake to leave the entire control of the Observatory in the hands of a native."

The succession of squalls and rain-showers which had prevailed through the night continued until about 10.30 a.m. with steadily augmenting violence, the wind blowing up to then from N.N.E. Then abruptly it veered to E., taking on such force that weaker trees were uprooted and snapped off short. Thus far no great damage had been done, but between 11 and 12 o'clock a sudden noise like the rumbling of distant thunder told the startled

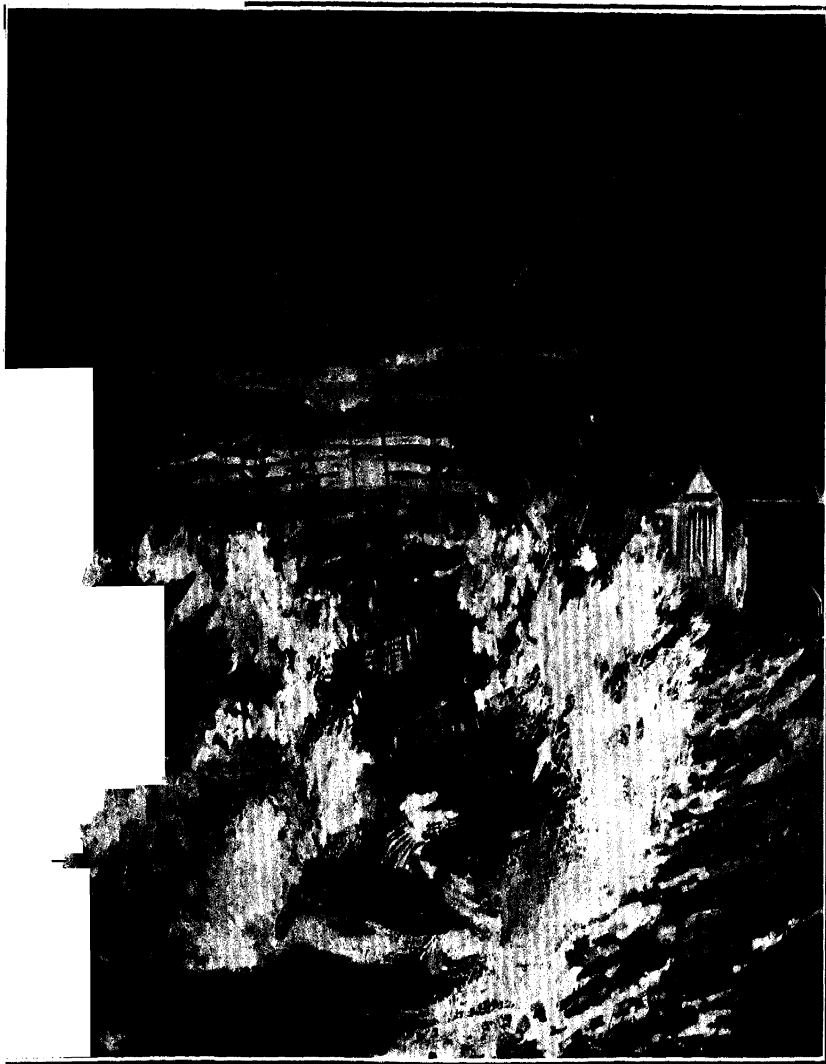
inhabitants of Calcutta that something formidable was on the way, and then the gale changed to a tempest, trees split up and cracked and fell across the road, so that residents at Garden Reach were literally hemmed in. About noon it would have been impossible to leave the house without personal danger. Trees were torn up by the roots; doors blown in, breaking through their iron fastenings; walls blown down, and the roads rendered impassable by fallen trees and heaps of débris of broken wood and brickwork. About two minutes later the true cyclone was on the town. Wherever there were trees they were either uprooted and fell, carrying with them in many cases walls, railings and buildings, or their branches were snapped off like reeds and hurled away with the wind.

"Carriages and *pulkees* were upset and strewed the roads, mingled with débris of roofs, verandahs and fallen trees, Corrugated iron roofings were doubled up or torn, blown away like sheets of paper."

Such was the impression created upon a single individual, hemmed in, as he says, and therefore unable to know the vast havoc the storm was perpetuating far and wide elsewhere in the helpless city. The actual extent of that havoc we shall see presently, when we come to survey the condition of Calcutta after the tempest had passed; it is time now to describe what was happening meanwhile on the river.

When first it came on to blow, no time was lost by the representatives of the P. & O., B.I. and other shipping companies in securing their ships by carrying extra fastenings to the shore. The increasing violence of the wind, however, made all such precautionary measures unavailing, and the entire shipping of the port, except for a few vessels which sank or stranded immediately, was driven from its moorings over to the Howrah side of the river. "Every now and then," writes one who saw this amazing spectacle, "a loud report heard indistinctly through the roar of the hurricane indicated that some main- or foresail had gone to ribbons. Awnings, and even wooden roofing, were whisked off as if it had been so much thatch."

Despite the fury of the gale, however, the water itself was at this stage surprisingly calm, and the explanation seems to be that so long as the wind blew from the east,



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"The ships were hurled together into inextricable masses."

and therefore across the stream, it actually served to keep the waves down. But before long it veered again, setting due south and increasing tremendously in violence, and from then onwards the Hooghly became an inferno. But, terrible as was the position now of the unfortunate shipping, at about 3 p.m. came something which rendered it infinitely more terrible still. This was the sudden inrush of one of those terrible bores for which this tidal river has always been notorious ; but it was no ordinary one, it was a perfect giant among bores, which is said to have towered at a height of 30 feet when it flung itself on Diamond Harbour, where everything was smashed to ruins and the *Bentinck*, a hospital ship, carried inland for a quarter of a mile.

The spectacle which ensued was almost beyond the power of words to describe. "The tide is rushing up with fearful violence and velocity," stated an eyewitness, in a letter written while the awful scene was still in progress ; "the ghauts are covered with the wrecks of the dinghees and other native craft usually to be found at them ; a steamer with her funnel broken, her masts gone, and evidently beyond all management, is drifting violently upward, right in amongst a tier of ships which lie a little beyond ; another, with her funnel over her side, and all her ropes hanging in terrible disorder, is heeling over to the blast, every attempt to right her evidently hopeless." And here is the description given by another spectator, who watched from Tittaghur : "Up came the bore in the river, a grand sight ; the water rose some twenty feet above the banks, and in the middle a long curling line, high as a wall, rushed madly on, foaming and tossing like a furious steed ; over went the native boats like ninepins, some thrown high and dry on the land, others sunk to rise only in fragments ; five or six were dashed to pieces against the wall of our garden. . . . Our peaceful river resembled a boiling cauldron ; huge waves, reminding one of Brighton in stormy weather, dashed over the banks, inundating gardens and smashing everything opposed to them."

The ships were hurled together into inextricable masses, smashing and grinding one another to fragments. All the police hulks foundered, except for one at Prinsep's Ghaut, which was thrown high and dry. The buoy-vessel

Grappler, fouled by the *Princess Royal*, parted her chain, but was shortly brought up; then five other ships drifted on to her and swept her off, carrying away her rudder and all her masts except the mainmast. "There was a constant change in this panorama of destruction; as fast as vessels drifted away others replaced them," states one eyewitness, and this was amply confirmed in a letter written home by a member of the crew of the *Alumbagh*: "Ships kept drifting past us in twos and threes in rapid succession, some of them all but touching us. It is wonderful how we escaped collision. A native craft on fire came across our bows, but fortunately canted clear. . . . It was impossible to stand without holding on. Men went flying along the decks like so many paper men, hen-coops blew out of their cleets."

None who witnessed that picture of ruthless destruction would ever forget it. In all directions were the big ships floundering and wallowing about in utter helplessness, a few sometimes grouping themselves into a tangled knot, then abruptly scattering again to stagger and roll away on their senseless individual courses, like a crowd of drunkards engaged in some futile travesty of a round-dance. The crests of the raging waves were strewn with spars, timbers and the splintered fragments of innumerable small craft, all tossing in the wildest jumble. Native flats were foundering right and left, carrying their hapless human freight to the bottom without a chance of escape. "One flat sank with three hundred of them on board, a little way above my own house," wrote the local correspondent of the *Times*; "another flat sank with two hundred natives in it, and their bodies are washing up and down incessantly." Many European sailors, too, were to be seen floating in the churning flood on pieces of wreckage, and the number lost was estimated as high as three hundred.

Among the very few vessels which managed somehow to keep afloat in that watery hell were the *Worcestershire* and the *City of Paris*. Another which rode out the gale in safety was the *Forgan Hall*; the captain of this ship picked up 25 native boatmen out of the water, but had to watch seven others drown whom he was unable to reach in time. But the bulk of the shipping ended their adventures

either by lodging themselves firmly in the clinging Hooghly mud or by being flung together on the banks in fantastic tangled heaps. Not, however, that all had even that measure of good fortune. The fate of the *Persia* we have already seen, and the steamship *Moulmein*, too, after a brief struggle against the overwhelming waves, plunged head-foremost to the bottom. Another victim was the 1,000-ton ship *Ally*, which had left Calcutta the day before under the pilotage of Mr. E. Worthington, bound for Mauritius with a European master, a crew of 50 lascars and 300 emigrants. This vessel, which was caught by the hurricane while at anchor off Middle Point, drifted in the early part of it and then grounded on a mud-bank and capsized, just as the crew were engaged in cutting away the foremast. Eight or ten of the emigrants were the only souls saved. Among the lost were the captain's wife and three children, and one of the survivors stated that up to the very last he saw Worthington walking the deck and giving his orders in a cool and collected manner. A specially pitiable and heartrending sight, we are told, was that presented by the *Lady Franklin*, which lay off Coolie Bazaar. "The cyclone was at its height at the time," narrates an eyewitness, "and she was fast going down. The poor fellows on board had no chance of escape—even those who were able to swim—because of the frightful state of the river. They took off their shirts as signals of distress, but it was impossible for anyone to reach them, and soon after she went down, not even her masts being visible above water. The same sort of scenes, too, were enacted on other ships, and the helplessness of those ashore to help was most distressing."

One notable exception to this general impotence there was, though, and it was provided by a fine fellow named Edward Cleary. The *Govindpore* was just foundering near the middle of the stream, and Mr. J. B. Roberts was at the ghaut with a handful of police, trying to find some means of passing out a rope to the wreck. But to swim out in such a gale seemed almost hopeless, and even the offer of Rs. 100 as reward would not tempt anyone in the large crowd to make the attempt. At this juncture, however, up came Cleary and, though knowing nothing of the

proffered reward, promptly volunteered. With a rope tied round his waist he dashed into the water, and actually succeeded in reaching the sinking ship and making the end of his lifeline fast to her bows, whereupon the nine men aboard her came safely to land, the captain being the last to leave.

Ashore, too, the bore committed dreadful devastation. "When the vast wave burst in," states one correspondent, "there followed such a scene as I never witnessed before. Within a few minutes the water about my house was at least three feet deep, if not deeper, and a flood extended as far as it was possible to see through the storm. . . . Meantime, natives from all quarters were coming for shelter, which of course I gave them, and learned that the bore would begin to go down at 5 o'clock."

It was on a dismal picture of universal desolation that the sun rose next day. "This morning at 6 o'clock I went out, and saw trees torn up by the roots lying in all directions. Neemuck Ghaut was impassable, but with some climbing I managed to reach the P. & O. steamer-office. . . . At that time the poor fellows were even leaving the great hospital ship, the *Hindustan*, as unsafe. . . . The King of Oude's buildings"—that is to say, the ex-Nawab's fantastic palace in Garden Reach, which had ceased to be a fashionable suburb on that former potentate's being permitted to settle in it—"were dismantled and flooded, and I understand from a friend that earlier in the morning he had seen many of the zenana ladies in a condition eminently calculated to offend their sense of the proprieties. As to the masses of native huts, they were simply blown down and then flooded; indeed, during the gale many sad groups of poor natives with their wives and children were to be seen struggling through the flood."

The writer of the above makes a reference to the hospital ship *Hindustan*, an old hulk used also as a floating church, and actually it was not until later in the morning following the storm that this veteran's adventures came to an end. At sunset on the 5th, the P. & O. vessels *Nubia* and *Nemesis*, had both been safe, the former with her main and mizzen masts blown clean out of her, but otherwise uninjured in hull or engines. "In the morning, however, the old

Hindustan, whose stern moorings had given way, got foul of her own landing-stage and hung across a very strong ebb-tide, laying over a great deal and taking in water through her old top sides. We ordered everything removable to be got out of her. An hour later she settled down very deep in the water, then parted from her bow-chain and rolled down on to the *Nemesis*, whom she tore away from her anchors and drove on to the *Nubia*, carrying her also down the river. A little way beyond the sheers the *Hindustan* rolled over and went down."

Far as the eye could reach was unbroken waste and gloom. Scarcely a tree was left standing, the roads were all choked with fallen trunks and rubble, and the telegraph-wires were all down. The Government Dockyard was a pile of ruins, the magnificent park at Barrackpore and Calcutta's famous botanical gardens had simply ceased to exist. The eastern and southern suburbs of the city, together with other districts which, through their proximity to the *maidan* and the river, had been exposed to the storm's full violence, were wrecked out of all recognition. Nothing was left of the beautiful avenues of Fort William; Eden Gardens were a wilderness; in Tank Square the trees and shrubs had all been blown away and the railings torn out of the ground; a splendid avenue of *usoth* trees opposite St. James's Church, some of which measured five feet in circumference, had been snapped off like mere sticks above the level of their protecting wall; the roof had been blown off the Free School, nothing was left of the Free Church of Scotland's steeple or the upper portion of the Roman Catholic Church in Bow Road; the minarets had all been blown off the Mosque of Dhurumtolah; the Cathedral and St. James's Theatre had been all but destroyed; the roof of the Barrackpore station was carried for a distance of 500 yards, and two trains full of passengers were blown clean off the line, wheels uppermost. These are but a few samples of the devastation wrought by the gale's savage power, but they will serve.

"But the terrible and almost heartrending sight," we are told, "was the river. . . . At least three hundred sailors are said to have been drowned, and as for the natives, the accounts are so extraordinary that I fear to give them

currency. An old Calcutta merchant estimates that 50,000 perished in the bore and hurricane." (As a matter of fact, the official computations eventually placed the native deaths at about 60,000.) . . . "One wreck is a melancholy sight ; we have here before us upwards of a hundred splendid ships and steamers lying like old hulks upon the water, or jammed together in heaps, with masts and rigging gone, and scarcely any possibility of making them seaworthy again. . . . I have seen such a vast number of wrecks and deserted ships this morning as I hope never to see again, and as I am quite sure could never have been seen before since the commencement of recorded history. The sight was made doubly horrid by the crowd of sightseers in consequence of the Doorga Poojah holidays."

Appalling in very truth was the situation of Calcutta. The number of sheep, cattle and fowls that had been drowned in the storm was beyond all computation, and meat of any description was unobtainable in the bazaars, while stocks of other food, too, had perished for the most part, so that the vast bulk of the native population, already homeless, stood now in danger of starvation. And there was another very imminent peril—the peril of pestilence, by reason of the exhalations rising from huge quantities of decaying vegetable matter and the stench of the multitudes of human corpses and carcasses of animals that strewed the river-banks. Business, of course, was entirely at a standstill, and to make a start with the work of reconstruction was impossible, inasmuch as native labour was not to be obtained for love or money. Indeed, the natives were simply paralysed by the magnitude of the calamity ; for days afterwards they could not stir a finger to help themselves, but simply cried like children. On the Thursday some Englishmen held a meeting for the purpose of sending a steamer down the river with supplies of rice ; "but the rich natives held back, as they always do. . . . The wealthy Bengalees refuse as a class to give anything towards the aid of their countrymen. They think the English ought to support them, and, as usual, they cry to the Government for help. Men who have lakhs at their command will absolutely not give a single pice to keep their own countrymen from dying of starvation. . . . The more you do for

the Bengalee, the more you may, and the more he will abuse and slander you for your pains." Let every student of the present Indian situation mark and inwardly digest this considered verdict from one who knew his India and cherished no illusions about his little brown brother, the Bengalee. . . It is but fair to add, though, that certain other sections of the Indian population displayed a very different spirit. Notable among these were some Bombay Parsees, including Sir Jamsetjee Jeejeebhoy, who were at Poona when news of the great disaster reached them. They at once made up a sum of Rs. 75,000 among them, and Sir Jamsetjee's brother brought up the total to the equivalent of £10,000.

The position of Calcutta following this awful calamity cannot be better summed up than was done in the following eloquent passage from a letter written in those days of despair: "The catastrophe is one for which nothing can be done now. The ships are lost, the people are drowned, houses are damaged and property destroyed, and the mere question of repairs is the work of time."

THE ALBION COLLIERY DISASTER

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IN the very heart of the South Wales mining district, at Cilfynydd, a village near Pontypridd, in the Taff Valley, and some twelve miles to the north-west of Cardiff, lies the Albion Colliery, a large undertaking which in 1894 gave employment to about two thousand men and boys. It was in those days a comparatively new colliery, though one of the biggest in South Wales, but was familiar to the public as having served as headquarters for the cavalry during what was then known as "the great coal strike", when it had been necessary to draft troops into the district in order to quell the riots. The shafts of the mine were 520 yards deep, but the pit was ventilated by a Shiel fan working at the rate of approximately 200,000 revolutions per minute, and the ventilation was accordingly regarded as particularly efficient. The 4-foot seam of steam coal in this colliery was worked on what is called the "long-wall" system. From the down-cast shaft, 19 feet in diameter, almost straight roads ran north-west and south-east. The north-west road, called Grover's Level, sent out a branch to the west, known as Dudson's Level, while the south-east road sent out two branches—one to the east, called Panddu Dip, and the other to the south, called Bodwenarth Incline.

Up to June, 1894—the time, that is to say, of the appalling catastrophe about to be described—the Albion Colliery had been exceptionally free from accidents, but an examination of the history of the region in which it is situated leads one to the conclusion that in this respect it must be considered to have been merely lucky. For the Welsh coal district had attained a terrible notoriety; of the thousand odd lives lost annually in British mining disasters, an exceedingly high proportion were those of Welsh colliers. Nor was

this surprising in view of the ever-present perils amid which the miners of the district worked. In 1893 Mr. Henry Hall, Her Majesty's inspector of mines for the Liverpool area, carried out a series of experiments to determine the extent of the part played by coal-dust in colliery explosions, taking for this purpose samples from all parts of the kingdom. "Of the whole of the dusts tested," he wrote in his report, "that from the Albion Colliery, Glamorgan (Aberdare or Merthyr 4-foot seam or upper 4-foot), excelled all others in violence and sensitiveness to explosion, and this seam in the South Wales district has the worst history of any in the kingdom, upwards of 1,600 persons having been killed in it by explosions since the year 1845."

With such an unenviable reputation placed officially on record, it might be supposed that the regulations laid down for the conduct of affairs in the Albion Colliery would have been stringent in the extreme and enforced with exemplary strictness. That such was hardly the case, however, seems indicated by the outcome of the inquiry which followed the disaster, and if the general public felt no cause for anxiety, the same cannot be said of the miners, the people most nearly affected by a lack of adequate precautions. "It is a wonder that the explosion did not happen before," observed one collier in the course of an interview after the explosion. "There are stalls—dozens of them—that have never been filled with rubbish and not properly penned. A good many old colliers have remarked that we should have an explosion some day, and here it is!"

We need not be surprised, bearing in mind the well-known leanings of the Welsh towards the uncanny, if this catastrophe produced its due tale of "premonitions". A little while after the explosion a middle-aged collier was overheard to remark to a younger companion: "Look you how Mrs. Bule's dream has come out. Bule woke up this morning with a scream, and when she asked him what was the matter, he said he had dreamt he was jammed between two doors. She did not want him to go down, but he went, and there he is now, poor fellow, indeed." "Aye," answered the other miner, "and things have been going wrong all the week. Two 'drams' fell down the

pit, ropes would not work, and no 'drams' to be got when we wanted 'em. And I, too, heard that one fellow had dreamt that the top of the pit was off."

The calamity came to pass on the afternoon of Saturday, June 23rd, 1894. And providential indeed it must be considered that it was a Saturday, for the shift at work was then of necessity a comparatively small one. Even as matters were, the thing was dreadful enough, but imagination will scarcely permit one to contemplate the magnitude of the tragedy which must inevitably have ensued had it been any other working day. . . .

The afternoon-shift had gone down to its labours at about 2 p.m., while a number of the day-shift also continued at work. Exactly how many men were in the pit was for some while afterwards not quite clear—a circumstance which provoked considerable adverse comment—but it was known that 13 cages had descended the shaft, each containing not less than 20 men, so that the number could be computed at something between 260 and 280.

It was at exactly a quarter to four that a stupendous detonation brought all the inhabitants of the district rushing to their doors, while the concussion made the windows rattle in their frames in every village for miles around. Folk dwelling close to the colliery had no need to ask whence had come that shattering report ; instinctively all eyes were turned to the pit-head, and there they beheld a sight to strike terror into every heart. So great had been the force of the explosion that the corrugated iron roofing of the down-cast pit had been completely blown to pieces, while huge balks of timber had been flung about in all directions as though they had been straws. The great beams fixed across the shaft to form the platform—they measured 20 feet by 15 inches square—were wrenched out of their sockets and bent like pieces of wire. The mere fact that the blast had been capable of sweeping through the swiftly-revolving Shiel fan and still retaining the power to blow these beams out of position is in itself a sufficient testimonial to its colossal violence.

Almost immediately after the first explosion was heard the roar of a second, and then from the mouth of the pit

came rolling voluminous clouds of black smoke, interlaced with flickering tongues of flame. The feelings of the wives and mothers and sisters of the men below can be better imagined than described as they gazed in stunned horror at that spouting volcano. Then with one accord everybody rushed to the colliery yard: in a few minutes it was packed with a frantic throng of people clamouring for news of their loved ones—news that at this early juncture could only be denied them. Presently the uproar subsided, the crowd settled down to await tidings with fatalistic composure. "Now and again," narrates one who was present at that sad scene, "a woman's sorrow-stricken face appeared on the confines of the crowd, drawn to the centre, where latest information could be gleaned, with hopes and fears blended in the highest pitch of anxiety, but there were no instances of uncontrollable grief around the pit." Before long, moreover, the throng was under the control of a force of police under Inspector MacDonald.

Meanwhile, the fan had been set going again—by heaven's mercy it was not seriously damaged—and preparations were being made for the descent of rescue-parties into the pit, for which scores of volunteers eagerly came forward. Owing to damage done to the pit gearing by the blast of the explosion, it was some while before the cage could be got ready. Within an hour, however, the mechanism had been restored to working order, and then down went the first party of exploration, consisting of Mr. Philip Jones, manager of the colliery, Graves, the pitsman, and a number of firemen.

It was not until 5.15 p.m. that the cage reappeared. As it slowly rose towards the surface the excitement of the waiting crowd in the yard rose to fever-pitch. Those standing nearest to the barricaded pit could hear voices ascending from the depths. Were they the voices of men found still alive down there and rescued? . . . Then the occupants of the cage came into view, and as they did so the incipient hopes of the multitude were dashed to earth. None was in the cage save Jones and Graves, almost unrecognisable beneath a coating of wet coal-dust. But surely, even so, they brought news with them—*some* news, however slender? . . . No; there was no news. Only

that they had found the bottom of the pit terribly damaged, with empty trams lying all over the place, and had seen a couple of dead horses. The crowd subsided again into its previous dumb patience. . . .

A second rescue-party then went down, including Mr. H. G. Wales, a Cardiff engineer and formerly agent to the Great Western Colliery, and Mr. Hugh Bramwell, his successor. They took with them fire-buckets, a number of tin jacks full of water, and a supply of brattice-cloth, nails, and materials for repairing doors. And the efforts of this party met with some success, for at about six o'clock the cage reappeared at the surface, and Pitsman Graves handed to Mr. William Lewis, agent to the Albion Colliery, a piece of paper bearing the laconic message, "Some men dead, some men alive." Actually, eight live men and thirteen dead ones had been discovered within 100 yards of the bottom of the shaft.

Mr. Hugh Bramwell has placed on record an account of this second party's experiences, of which the following is an extract: "Our descent was very slowly accomplished, in consequence of one of the cages having been so seriously damaged that it would scarcely run. It took us about a quarter of an hour to get below, and even then we could not get the cage to the bottom, because of the accumulation of rubbish and trams thrown to the bottom of the shaft by the force of the explosion. We had to climb down from the cages by means of the ropes. We found that the timbers were blown about, several trams upset, and all things generally in confusion.

"Immediately upon getting below, we turned our attention to the boilers inside the workings, and made an effort to extinguish the fires, for the steam was blowing off. The reason for this was that owing to the disturbance of the ventilation by the disaster—the blowing off of brattice doors and other matters—the current was being driven through the boilers. We raked the fire out as much as we could, and then finally extinguished it by pouring on water. We then filled up the holes in the separation-doors so as to carry the air into the workings and prevent its further escape up the down-cast.

"Meanwhile, efforts were being made by others of the

party to restore the ventilation in that district. I, with several others, went up the Cilfynydd side of the pit ; and when we had got in about 200 yards we came across six or eight men who were alive. They were all unconscious, and some of them groaning. We at once sent word to the surface for the doctor and stretchers, and meanwhile did all we could to relieve their suffering. I noticed that coal-dust was caked on the boilers and on the timbers. We failed to go very far into the workings at that time, on account of the after-damp, which was so strong that Mr. William Lewis and myself were forced to turn back.

"All the bodies we saw were more or less burned and shattered. One poor fellow had his head very badly crushed, another we noticed had lost his leg, and this within a few yards of the bottom of the shaft. . . . The bodies lay in all directions and in a variety of postures, and they had all been killed, I should imagine, by the force of the explosion."

Immediately on receipt of the message from this party, medical aid had been sent for, and Doctors Lytle, Leckie, Cochran, Williams and others were quickly on the spot and descended the shaft, accompanied by Mr. William Lewis, who had recovered sufficiently to renew his activities. In the meantime, a carpenter's shop was hastily cleared to serve the purposes of a temporary infirmary, while for the reception of the dead a convenient hay-loft was prepared.

At the bottom of the shaft the doctors rendered first aid to the eight poor fellows who had been found alive, then sent them up for fuller attention in the carpenter's shop. Alas, beyond those first eight the exploring party was able to find no trace of life in the gloomy caverns of the mine. Once, indeed, they did believe they heard voices of men calling faintly from beyond the huge walls of débris, but the state of the pit prevented any further progress for the time being, and, besides, after-damp was beginning to make its noxious effects felt, so that the rescue-parties had to be recalled. There was nothing more that they could do until the miners should have made an appreciable clearance of the falls.



ALBION COLLIERY DISASTER

"Steadily the work of extricating the dead went forward."

It was at about 9 p.m. that the first of the dead was brought to the surface, and the scene then was weird in the extreme ; for the colliery's dynamo had had an accident a fortnight or so previously, so that the yard now had to be illuminated with "comet flames". The faces of dead and of living alike were covered up, and the crowd was therefore unable to tell to which category each fresh arrival belonged until it was seen whither the bearers carried their burden—to the carpenter's shop or to the hay-loft. As each stretcher came into view, a rush was made to try and ascertain the identity of its occupant. A particularly pathetic scene took place when two of the rescued were brought up in charge of Mr. Edward Jones, manager of the Ynysybul Colliery, Mr. T. Meredith, manager of the National Colliery, and Mr. D. Gibbons, manager of the Trebarris Colliery. One of the poor fellows was laid on a stretcher and sent off to his own home. The other, however, a mere lad, was placed on Mr. Gibbons' back and carried thus to the carpenter's shop. It was a melancholy task for Mr. Gibbons, who knew that the boy's father, a fireman, lay dead below.

As time went on, the rescue-parties discovered nine more men alive in the workings, bringing the total to 17, but one of these expired after being brought to the surface. The victims were all suffering from burns and blisters about the hands and face and from the poisonous fumes of the after-damp. Scarcely any were conscious when found, and only in very rare cases were they able to speak. Indeed, some had not yet recovered consciousness late in the following afternoon. Two, and two only, of the injured miners were able to make their own way home with a little assistance, a boy and a man named George Bumford.

The task of the exploring parties was difficult in the extreme, for there had been very heavy falls on both sides, several of them from 120 to 150 yards long, and beneath these falls large numbers of the dead lay completely buried. Again, practically all of the horses below the surface at the time of the explosion had been killed—there were about 120 of them—and their carcasses interfered very considerably with the work of exploration. Parenthetically, the only two horses brought out alive were found in the stalls,

from which, by a cruel irony of fate, six men had rushed out to their death. . . .

Terrible sights confronted the searchers at every turn. Men and horses alike had been torn asunder by the awful blast, and the distances to which the fragments were blown bore witness to its violence. Many there were, however, who had escaped the impact of the explosion itself only to succumb to the deadly fumes. Numbers of them showed signs of having put up a hard fight for life. One poor fellow had wetted his cap with tea and held it over his mouth in the endeavour to keep out the choke-damp. In one spot was found evidence of a particularly poignant tragedy—a group of 24 men lying dead, every one of whom would have been saved had they but remained in the place where they were working at the time of the explosion. But in their panic they had rushed into the very midst of the after-damp, to which they had quickly fallen victims.

Steadily the work of extricating the dead went forward, and by the Wednesday evening 268 bodies had been recovered, of whom 242 had been identified, these figures including six men who had been rescued alive but had since succumbed to their injuries. It was feared, however, that even this appalling total would be found to fall short of the whole loss of life wrought by the explosion, and when the official figures were at last published this proved only too true, for the death-roll stood at no less than 288.

Identification of the bodies was frequently far from an easy task. In many cases the features and head were so terribly burnt that they could only be distinguished by the aid of the clothes or the contents of the pockets, or by the name or initials on their lamps in cases where the latter had been found in their hands or lying close by. There was in this connection one incident of considerable drama. A party of searchers hunting for one particular man found his initials on a lamp which lay in the grasp of one of the dead, so they very naturally went to inform the wife of the man they sought that they had discovered his body. On arrival at the house, however, they were confronted by no less a person than the man himself, safe and sound ! It transpired that he had some time previously

lent his lamp to another miner—the poor man whose mortal remains now lay in the mortuary.

In order that the dead might be buried without unnecessary delay, the inquest was opened as early as the Monday. The dead men having belonged to two coroners' districts, a double inquiry was required, and to that end two separate juries were empanelled. They sat together, however, in the dining-hall of the New Inn Hotel at Pontypridd, and the proceedings were adjourned directly after evidence of identification had been taken.

On the resumption of the inquest a pathetic incident occurred. For before the jury were sworn, a man entered the room and asked to be permitted to say a few words. Told that he could not do so, he went and sat down with his face buried in his hands, evidently in very deep grief. He was the father of three men killed in the disaster. Such wholesale tragedies, however, were only too common. In one house lay the bodies of a father, four sons and six lodgers. . . .

From the survivors of the catastrophe it was not possible to learn much that could be of value in determining the cause and nature of the explosion, for not only were their recollections vague and sketchy in the extreme, but they had practically all lost consciousness almost at once. Thomas Howells, of Cilfynydd, for example, gave evidence that he had lost his light before the explosion took place, and had gone back to the lamp-station near the bottom of the pit. He did not even remember whether or no he reached the station before the explosion. He heard no noise, but did see a fire, and was immediately rendered senseless. So far as he could recollect, the flame was blue and came carried on the air-currents. The work he was engaged in consisted of filling dry rubbish, but there had not been much dust. More than this Howells could not tell.

Richard Bumford Ripper, of Ann Street, Cilfynydd, was able to shed a little more light, but not much. He, it seemed, had been working in company with five other men. They had heard two claps like thunder, which were followed by the banging of the doors between them and the double parting in the engine-deep. Next minute the level had become choked with dust. As it came, their lamps

had gone out and they had thrown them away. Through the dust they could see the glare of flame. It was blue, and passed over their heads. After remaining there for a while witness had walked off into the Panddu Dip. There he had encountered after-damp, and recollected no more until he recovered consciousness on the bridge.

The finding of the coroners' juries was that the deceased had lost their lives through an explosion of gas which was accelerated and extended by coal-dust ; they were unable to agree, however, as to the exact place where the explosion had had its origin. They added an unanimous opinion that shot-firing had been practised in the colliery when men were at work, contrary to the rules and without sufficient precautions being taken to ensure their safety ; also, that the under-manager had neglected his duty in not seeing that his subordinates in the night shift performed their duties in accordance with the regulations ; that the firemen were negligent in not reporting gas when found ; and that there was not in force a proper system of watering the mine. Their recommendations, accordingly, were that shot-firing in timber be absolutely prohibited ; that all old workings be properly stowed or gobbed ; that a record be kept of the number of men in the mine at all hours ; and, finally, that thorough examinations be more frequently made by Her Majesty's inspectors. "For we consider," they declared, "that the present examinations by the workmen's representatives are worthless."

The mine was thoroughly examined on July 4th by Professor Dixon, of Victoria University, Manchester, a member of the Royal Commission on Explosions from Coal Dust in Mines, and, for the sake of the bearing they had on the juries' findings, his conclusions are worth reproducing at some length.

"The flame," he reported, "traversed nearly all the main roads on both sides of the shaft. . . . On entering Grover's Level from the shaft, the force of the explosion was plainly seen to have been exerted towards the shaft. For several hundred yards the props were bent outwards, while the doors into the return were blown towards the return. Near the first fall, the direction of the force changed ; little violence was exerted, and the men found there were

burnt but not mutilated. About 100 yards inside the first fall, however, much violence was exerted ; the bodies were mutilated, and all the indications showed that the flame had travelled inwards and reached the working faces.

"The flame must have entered Dudson's Level from Grover's Level, have travelled along this till it reached a dust-free part, and have there been extinguished. Thirty-seven men were found together in the workings out of Dudson's Level ; they had evidently tried to find their way out, and they were not burnt, but killed by after-damp.

"In Panddu Dip the explosion travelled inwards for about 170 yards. Then a wet length of road stopped it. Men and horses in the workings beyond this were rescued alive ; they had only felt a rush of air.

"The evidence shows that the explosion originated in Grover's Level, and there can, in my opinion, be no question that throughout its main extent it was a pure dust-explosion. The fireman and timberman were found in positions consistent with the view that they had just fired a shot at the first fall. A wooden prop showed signs of a dynamite shot having been fired in it. I am driven to the belief that the dynamite shot fired in the prop close to the dry dust raised a cloud of inflammable particles and set them on fire. . . . Once a cloud of dust was ignited, the explosion would extend in all directions so far as the dust itself on the roads extended. . . .

"I saw no evidence that water had been used to lay the dust at the first fall, and could not learn that watering had been adopted on this occasion. . . . But the company were aware of the dangerous nature of the dust ; I found the waterpipes intended to damp the dust by spray already extending some distance along the intake."

In addition to this statement of Professor Dixon's, there was an official report made on behalf of the Home Office by Mr. Roskill, barrister-at-law, and Messrs. Robson, Hall & Martin, three of Her Majesty's inspectors of mines. They declared themselves unable to indicate exactly the root-causes of the explosion, but recommended that various specified persons be prosecuted for offences committed in contravention of the Coal Mines Regulation Act. The

resultant proceedings were heard before the Pontypridd stipendiary in October, Mr. Roskill prosecuting, and William Anstes, the charge-man, was convicted of illegally storing 23 lbs. of dynamite in the mine and fined £2, while Mr. Philip Jones, the manager, was fined £10 for having permitted the said storage. Against the under-manager, however, who was accused of neglect of duty, the stipendiary declined to grant a case.

The Queen and the Home Secretary had telegraphed their sympathy immediately on receiving news of the terrible catastrophe; indeed, the whole of the United Kingdom joined with South Wales in its sorrow. But sympathy was not enough: financial help was needed, badly and without delay. In his appeal to the nation for monetary assistance, the chairman of the Monmouthshire and South Wales Miners' Permanent Provident Fund declared that never in 40 years' experience of mining had he known a case in which the necessity for public support was more urgent. This Society, established 13 years previously, was kept up by contributions from workmen, employers, and some of the landlords. It had a membership of more than 60,000 workmen, and had since its foundation paid out more than a quarter of a million pounds to widows, children and disabled members. There were at present on its funds, apart from this fresh disaster, no less than 617 widows and 1,100 children, their cases attributable for the most part to small accidents causing only one or two deaths, of which the public heard scarcely ever a word. All the victims of the disaster, the Chairman pointed out, were members of the Society, and were therefore deserving of sympathy as men who had made for their dependents such provision as lay within their power. There was now a very grave addition to the Society's burden—so grave indeed, that the demands made upon it might even jeopardise its existence. There would be at least 150 widows and 300 children to be added to those already on the funds. To provide these with even the very modest allowances of 5s. and 2s. 6d. per week respectively would require £50,000.

The nation, as always, responded swiftly and generously to the appeal. The proprietors of the colliery set the

example with a subscription of £1,000, and a similar sum was promised by a Cardiff firm, while the Lord Mayor of London opened a Mansion House fund. In less than three days a relief-fund originated by Welsh members in the House of Commons had reached £1,100, and the Marquis of Bute had expressed his intention of contributing £1,000. All the city companies subscribed open-handedly ; by August 10th the Lord Mayor's fund exceeded £5,000, and a list opened by the Mayor of Cardiff totalled £7,000.

To say that South Wales was profoundly moved by the Albion Colliery tragedy would be to be guilty of understatement. As early as the Sunday, indeed—the day following the explosion—20,000 people flocked into Cilfynydd. On Wednesday, June 27th, every colliery in the Rhondda Valley stood idle, approximately 30,000 miners quitting work to visit the scene of the disaster and assist in the innumerable funerals. That day an open-air prayer meeting was held on the mountain-side in the vicinity of the pit ; thousands attended it, and the proceedings were of a most touching character.

The funerals were continued on the Thursday, one of the processions that day being more than two miles in length. At some of the grave-sides the mourners joined their voices in the beautiful old Welsh hymn, "*Bydd myrdd o ryfeddodau ar doriad boreu wawr*", in which the glories of the resurrection morning are depicted in glowing language, and the effect was unspeakably thrilling, as well as eerie, when the haunting refrain was picked up and repeated by the crowds assembled beside other graves in different parts of the cemetery. In other cases, however, singing was noticeably absent—noticeably, because it is so usual a feature of burials throughout Wales—and the proceedings were carried out in a dull and heavy silence.

Forty-one of the interments of one day took place in the cemetery of the Pontypridd Burial Board at Glyntaff, a picturesque spot lying on a gentle slope looking down upon the Taff Valley. It was here that, among others, two Irishmen were buried together. Both had been named James—James Cullin and James McGrath—and the scene was distressing in the extreme when their two wives began to call out hysterically to their respective husbands by name.

But perhaps the weirdest spectacle of all was presented by a man whose Celtic nature, worked up to a condition bordering upon ecstasy, found expression in ministering to the wants of the multitude. "The sun shining brilliantly," we are told by an eyewitness, "had a severe effect upon all ; the necessity for quenching thirst was great, and one Good Samaritan took his stand near the bridge, and from a bucket, frequently replenished, gave cups of water to those who required it. . . . Throughout the afternoon his voluble invitation to 'drink of the fountain of life' was accepted by young and old of both sexes, and whilst ladling from the fountain he kept up a running fire of commentary on the lot of the collier, the benefit of water, and the want of sympathy between rich and poor, occasionally making passing reference to his experiences as a thirst-soother in the late coal-strike, and thereon claiming for himself the appellation of '*champion giver of water, bar the Almighty*'."

THE CHATSWORTH RAILROAD HORROR

THE CHATSWORTH RAILROAD HORROR

THOUGH now almost forgotten, the disaster which occurred on the Toledo and Peoria and Western Railroad, U.S.A., on the night of August 10th, 1887, must still rank among the most terrible that the world has witnessed, whether regarded from the standpoint of its huge list of casualties or from that of its dreadful accompanying circumstances. Not without justification did the newspapers claim that "all railway horrors in American history have been surpassed", for there were no less than 355 persons killed and injured.

The record of this railroad was already a chequered one, though in respects other than that of accidents. In 1880 it had been leased to the Wabash. Then, when the latter company drifted into the hands of a receiver, it had been taken into possession by the holders of the first mortgage bonds of the Toledo, Peoria & Warsaw. In October, 1886, it was brought to sale and bought in for the benefit of these bond-holders. A new company was then organised, which took possession in July, 1887, and, for some reason, changed the name of the line to the Toledo, Peoria & Western.

A burning bridge was responsible for the awful catastrophe about to be described, but exactly how the bridge came to be on fire was a question to which it was found exceedingly difficult to discover a satisfactory answer. For several days past there had been fires along the line all the way across Illinois, for the country had been exceptionally dry throughout a long period, and a spark from a passing engine was no doubt sufficient to start a conflagration, while the woodwork of the bridge, being like tinder, would catch alight easily enough. There were, however, after the accident, ugly stories of robbery of the dead and dying, and there were many who believed in

consequence that the bridge had been deliberately set on fire. As against this theory, the train was an hour behind time—a fact which the robbers could hardly have known, so that it was very unlikely that they should have timed their work so perfectly. However that may have been, the coroner's jury arrived at the conclusion that the fire was due neither to an engine-spark nor to the action of bandits, but simply and solely to the gross negligence of railway employees. Their verdict was that the bridge was ignited from fires which had been set as late as 5 p.m. that afternoon by the section men, and as close as 16 feet on both the east and west sides of the bridge. They also found guilty of criminal carelessness one Timothy Coughlin, foreman of Section 7, in that he had disobeyed positive orders from his superior to examine the track and bridges on his section last thing on the day of the accident.

The train which met with disaster was an excursion train. It had been widely advertised, and the railway officials were jubilant, for it was probably the most successful venture of the sort that had ever been inaugurated; indeed, it was probably even the biggest passenger train that had ever been taken out over that railroad. Bound for Niagara Falls, it carried 900 excursionists hailing from various points in Central Illinois; there were passengers from Canton, from El Paso, from Washington, and even from districts as far west as Iowa, though the bulk belonged to Peoria. The complement had been gradually made up all along the line, for the rates were exceptionally cheap, and people of all sorts took advantage. The train was loaded to its utmost capacity. Every berth in the six sleepers was taken and the day coaches carried 60 people each.

In charge of Conductor John Stillwell, of Peoria, the train was composed of, first, three baggage-cars, then the private-car of Mr. E. N. Armstrong, superintendent of the road, and then six day-coaches, two chair-cars and the six Pullman coaches. Only one engine was attached at the depôt, notwithstanding the enormous weight to be pulled. However, another locomotive—ominously enough, its number was 13—was sent on ahead and taken on after the train had cleared the Illinois River bridge. Before

starting the journey, a vigorous protest was made to Superintendent Armstrong by Edward McClintock, the driver of the second engine, who insisted that the train ought to be taken out in two sections, but to no avail. Had his advice been taken, the driver of the forward section could easily have brought it to a standstill when the burning bridge came into view, and scores of lives would have been saved. But to run the train in two sections would have involved the services of an extra conductor and two extra brakemen, which would have cost six or eight dollars extra. . . .

The doomed train drew out of Peoria at 8 p.m. with its load of passengers all in the highest spirits. It passed Forrest, the next station, an hour and a half behind time, but the six miles between Forrest and Chatsworth were made in seven minutes, which conveys some notion of the momentum with which the heavy train was now travelling. It was just after it had passed through Chatsworth that the blazing bridge was sighted in the distance ahead. This was at a point just east of the Piper City station, where the railway crossed the north fork of the Vermilion River, a stream which flows northwards and empties into the Illinois River at La Salle. The bridge, an ordinary wooden trestle affair, here carried the railway across a dry "run". The horror of the engineers, as the train thundered down towards this structure and they grasped that it was in flames, can perhaps be imagined. Realising in a flash that it would be impossible to stop even when the brakes had been set, they determined that their best course was to try to rush across, so gave every possible pound of steam.

Let Engineer Dave Sutherland, the driver of the foremost locomotive, give in his own words the story of those terrible moments: "We had just run up a heavy grade of about 300 yards," he states, "and as we came in view of the track ahead, both the fireman and I saw a little blaze on each side of the culvert. What attracted my attention at once was that the black embers of the culvert showed, and then I knew what was coming. . . . The fireman, Rogers, jumped, saying as he did so, 'For God's sake, man, jump!' For a moment my mind was made up to follow his example, but I concluded to stick by

the cab and take the chances. First, I reversed the engine ; then I thought better of it and put it on hard again, as we rushed towards the black hole in the track. Of course, all this thinking took but a second or two. We struck the thing, then came a lot of bumps and, thrown from my seat, I simply hung on to the lever. The tender broke off as we struck the culvert. We ran for 300 feet and then I stopped her. She was off the rails, but never off the track. Then I jumped off and ran back to the ruins."

"Back to the ruins. . . ." Well might Sutherland, in his artless language, apply that description to what was left of the celebrated excursion train, for this is what happened when the black gap was reached. The first engine, as already narrated, crossed in safety, preserved from destruction only by the terrific momentum. But even as it hurtled over the chasm, the bridge, its timbers all burnt to charcoal, gave way and carried the tender with it. Down on top of the tender plunged the second locomotive, together with its driver, Engineer McClintock, and Axil Applegreen, his fireman. It dived headlong into the gap then bounded sideways into the ditch, falling on its side. The cars behind crashed together with stupendous force ; their trucks and wheels jammed in one tangled mass in the gully or were driven deep into the bank on the opposite side, but their bodies went flying over the gap and piled themselves up into a mountain of splintered woodwork that stretched for a hundred feet along the track and filled the ditches on either side of the embankment, while simultaneously the brushwood at the bottom of the gully flamed up as though oil had been ignited there. Several of the coaches actually sprang high in the air, then toppled over and lay beside the line on their sides or bottom-upwards. In the twinkling of an eye almost a hundred poor wretches had been killed outright, 50 injured so badly that their case was hopeless, and hundreds more hurt less gravely. The titanic force with which the cars were jammed and mashed together could not be better illustrated than by the astounding experience which befell one Andy Mooney, of Peoria. At the moment when the accident occurred, Mooney and Conductor Stillwell were three cars away from

each other, the former being in the second coach and the latter in the fifth. Next instant they found themselves literally in each other's arms, the car in which the Conductor was travelling having been carried right over the two in front and dropped on top of that in which Mooney was. And neither man was hurt. . . .

A party travelling in Mr. Armstrong's private car likewise had an escape from death which can only appear miraculous. This party consisted of Mr. Armstrong himself, the wife and daughter of Mr. H. G. Gould, the general freight and passenger agent, and Mrs. Parker, wife of the Peoria train-despatcher. Their coach telescoped the rearmost baggage-car, but itself received comparatively little injury, though flung right across the track. Armstrong was thrown from the car through the gap left by the end being torn out, and fell flat on his face, receiving no injuries, however, beyond a few bad scratches. The women, who were all in bed when the crash came, escaped with bruises.

Fortune was also with the occupants of the six Pullmans. The first of these came to a halt on the very brink of the gap—so close, indeed, that its forward truck went half-way into the gully. The front of this car was broken somewhat, but none of the five sleeping-cars behind it received any injury whatever and none of those travelling in them were hurt. Three ladies from Galesburg—Mrs. Parks, Mrs. Smith and Mrs. Fowler—probably owed their lives to the fact that just before the smash they had left one of the front passenger-cars and gone to sleep in the smoking compartment of one of the chair-cars.

Very different—horribly different—was the fate of the passengers in the six day-coaches and the two chair-cars. Nearly all of these had been asleep, or at all events trying to get to sleep, and were stretched out in all sorts of positions on the seats. Many were dashed instantaneously out of their dreams into death, mangled and crushed out of all human semblance by the grinding timbers and ironwork, so that even their nearest relatives could not recognise them afterwards. Scarcely a soul in those cars escaped without injury, but the wonder is that any at all emerged alive. Among the victims were Mr. F. D. Weinett, a prominent democratic politician and ex-County Treasurer, and his

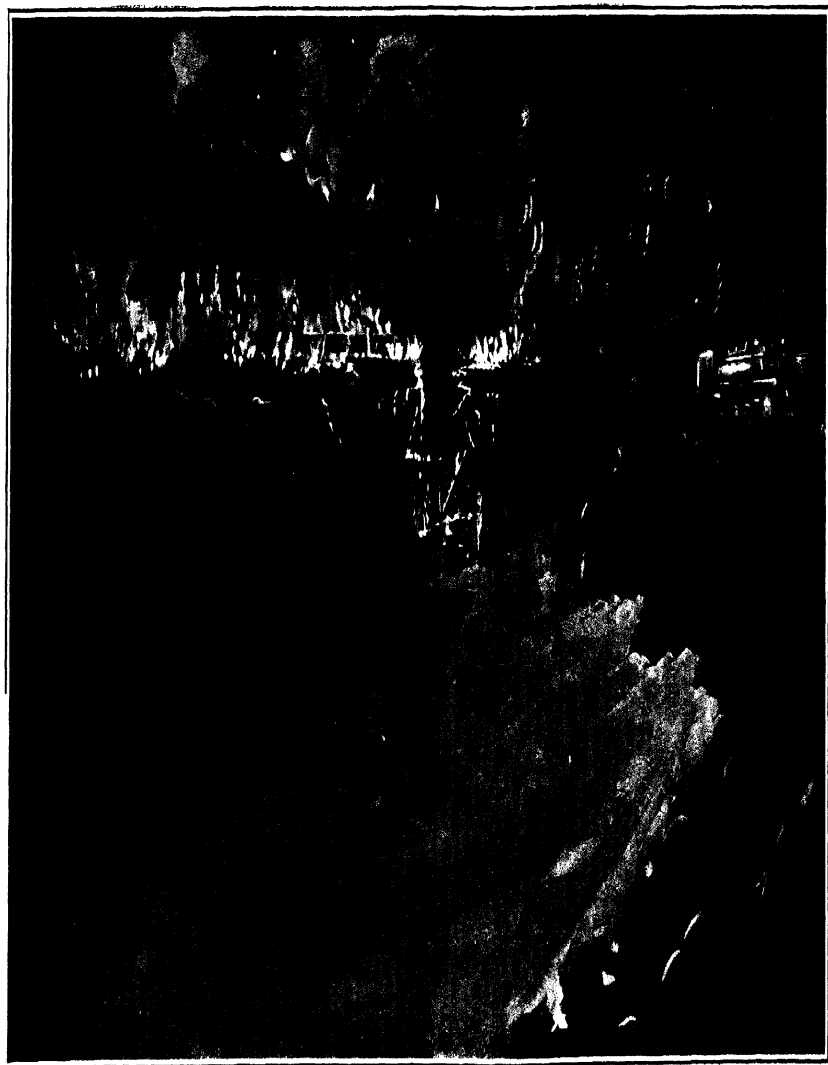
daughter. As for McClintock, the engineer, he was killed on the instant, his head and chest crushed to a pulp and his brains scattered on the grass. Applegreen was more fortunate, for he jumped from the cab the moment he felt the jar, fell into a ditch and rolled over out of danger's way, only injuring his right hand.

A passenger who had been in the third coach told afterwards that he was first conscious of a jar, and that when the cars crashed together the noise was like that of a red-hot iron touching water. Another surviving passenger who gave some account of his impressions was Mr. H. W. White. "I was in the second sleeper," he related, "and we were going along about midnight when there came a peculiar jolting. I thought that we had been derailed. Our porter said, 'We're all right,' when someone said, 'There's a fire ahead.' I got up and went to the front. The head engine had rushed on, but the second engine had tumbled into the chasm." This narrative at least goes to demonstrate how little shock was administered to the occupants of the Pullmans; it is difficult to realise, reading Mr. White's undramatic story, that in the moments he so unemotionally describes he himself was providentially preserved from a horrible death.

"For an instant after the sound of crushing timbers," wrote another survivor, "all was still. Then from out the awful silence rose groans and cries of agony. Flames leaped into the darkness, and, a storm arising, the wind and rain brought added terrors and dismay to the awful scene." Then out of the sleeping-cars came tumbling the uninjured passengers. They found themselves faced with a nightmare scene and so much work to do that it seemed as though human hands never could perform it."

"No words of mine," says Mr. E. A. Van Zandt, of Peoria, "can describe the awfulness of the scene. . . . I felt three distinct bumps, and then rushed out of the car and ran forward to the wreck. There the scene was horrible, horrible. The only light was the flames of the burning bridge, and above it the day-coaches were piled on top of one another in a heterogeneous mass."

Down in the ditch lay McClintock, dead, and his injured fireman, Applegreen. On top were piled the three baggage-cars, one on top of the other, "like a child's card house after



CHATSWORTH RAILROAD HORROR
"It dived headlong into the gap."

he had swept it down with his hand." Then came the six day-coaches, telescoped so completely that three cars were pressed into a space normally just sufficient for one. The second car had catapulted off its trucks, hurtled straight through the coach ahead of it and crushed the woodwork aside as though it had been mere matchwood." It lay there resting on the tops of the seats, while every passenger in the front car was lying dead or dying underneath. Out of that car only four people came alive. On top of the second car lay the third, and its bottom was smeared with the blood of its victims." The other three cars were not so badly crushed, but were nevertheless broken and twisted in every conceivable way, "and every splintered timber and beam represented a crushed human frame or a broken bone. . . . Luggage from the baggage-cars was scattered far and wide. The air was filled with the cries of the wounded and the shrieks of the dying. The groans of men and the screams of women united to make an appalling sound, and above all could be heard agonising cries of little children who lay pinned alongside their dead parents. . . . The smell of warm human blood caused many to grow sick. Dead men and women were hanging out of windows and holes in the ends and sides of the cars. . . . And another terrible danger was yet to be met. The bridge was still on fire and the wrecked cars were lying on and around the fiercely burning timbers. Everywhere in the wreck were wounded and unhurt men, women and children, whose lives could be saved if they could be got out, but whose death in a horrible form was certain if the twisted wood of the broken cars caught fire. . . . The only light was that of the burning bridge, there was not a drop of water to fight the fire, and there were only about fifty able-bodied men who still had enough nerve and presence of mind to do their duty."

For four solid hours those 50 men fought like fiends, with victory hanging in the balance, to extricate the poor creatures jammed in the heart of the wreckage and, at the same time, to hold the greedy flames at bay. Since there was no water to be had they used the only weapon which lay to hand—earth. There were no picks or shovels wherewith to dig it up, no baskets or barrows in which to carry it, and the long drought had made the ground almost as hard

as stone. Yet the fire *must not* gain ground, for if it did, 300 people would be burned to death. So with their naked hands those 50 valiant fellows attacked the unyielding earth, dug on reckless of the blood that streamed out from beneath their broken finger-nails. While some piled up soil in little mounds others threw it, handful by handful, on the flames, and somehow they kept them back. Meanwhile, other brave men crept under the wrecked cars and, with pieces of board, or sometimes even with bare hands, beat back the fire when it flashed up near some imprisoned wretch. "For God's sake don't let us burn to death!" came the perpetual agonised crying from the tumbled wreckage. The 50 set their teeth and toiled on, till at last, just as dawn broke on that scene of horror, the tongues of fire flickered out. . . .

"Several of us climbed upon the cars, with axes and lanterns, and went to work," related Mr. H. W. White, the first part of whose story has already been quoted. "The first man we found was Billy Stevens, a confectioner. He was dead. We pulled him out after some effort, and then pulled out his two daughters, Emma and Ida. They were all dead. Everyone was groaning and crying. Their feet seemed to be jammed. Most of them had their legs broken. After an hour and a half we cleared the car. Men were offering fifty dollars each for relief. Probably there were a dozen bodies taken out.

"I went down on the ground and assisted in letting the dead down. They put a plank up and they helped them out, sliding them down the plank. If they were dead they put them in one pile; if alive, they put them in another. Every live person seemed to want to see their family at once. There were in Mrs. James Deal's party five persons. All were killed but one, and were horribly disfigured. It was late next afternoon before they were recognised.

"One of the horrible incidents was a man well dressed who was so badly injured that his bowels were protruding. He called impassionately for water, and as he could not be attended to he finally pulled out his revolver and shot himself through the head. . . . One little boy, the son of the Methodist minister at Abington, Frank Snadecker, was found on the bosom of his dead mother. His left leg hung

by the skin. His right arm was broken and one eye was put out. He never uttered a groan. They pulled him out and tried to give him a drink of brandy. He refused to take it and said, 'Give me water.' I found a head hanging from the truck. It was apparently a man, and had been caught by the hair. I found several headless bodies."

Dr. Hazen of Fort Madison told afterwards of how he had felt a sudden jar and, in an instant, found himself and his wife wedged beneath the seats. He pulled the backs off two seats before he could extricate Mrs. Hazen, who was bruised about the body and had both feet badly crushed. The doctor himself had a dislocated shoulder, which he got someone to pull back into place. In helping others, however, he dislocated it again, and had to have it pulled into place a second time.

But of all the stories told of that terrible night none was more heartrending than one concerning a man, his wife and little child who were travelling in the second day-coach. All three were caught and held down by broken woodwork. When at last relief came, the husband said, "Take out my wife first ; I'm afraid the child is dead." They therefore carried out the mother, and as a broken seat was taken off her poor crushed breast the blood which welled from her lips betokened how badly she was hurt. The child, a fair-haired, blue-eyed girl of three, was taken out dead and laid beside her dying mother in a cornfield. Then the man was extricated. Both his legs were broken, but he crawled through the corn to the side of his wife. "Feeling her loved features in the darkness, he pressed some brandy to her lips and asked how she felt. A faint groan was the only answer, and next moment she died. The man felt the dead forms of his wife and child, and said, 'My God, there's nothing more for me to live for now.' And with that he drew a revolver and shot himself through the head."

Reference has been made already to the reports that found currency of robbers having plundered the dead and wounded. Counter-statements were made to the effect that these stories had been concocted by railway employees anxious to cover up their own negligence in the matter of the non-extinguished fires, and who hoped that the latter would be attributed to the hypothetical robbers. There can be small doubt, how-

ever, that the tales of plundering were authentic, for they came from the survivors themselves. It was never known whether the blackguardly deeds were committed by thieves who had accompanied the train or by some robber gang lurking in the neighbourhood. But whoever the fiends may have been, they entered the cars while the fire was still burning fiercely underneath, and when the poor creatures pinned there cried, "For God's sake help us out," instead they stripped them of their watches and jewellery and searched their pockets for money. One survivor was aided by someone outside to extricate himself, but no sooner was he safely out of the wreck than his rescuer grasped his watch and tore it from him. Several dead were found with fingers cut off in order to secure their rings. When the bodies were laid out in the cornfield, the human hyenas turned them over in their search for valuables, and in the morning 16 empty purses were found heaped together. The plunderers would have had short shrift had anyone had the time to attend to them. . . .

By the time dawn broke, assistance had arrived from Chatsworth, Forrest and Piper City. And by 8 o'clock there was quite an army of helpers at work, for as soon as the news of the disaster was flashed over the wires every able-bodied person in the district hastened to the scene. Dr. Steele, chief surgeon of the Toledo, Peoria and Western Railroad, came on a special train with two other surgeons and their assistants. From Peoria came Doctors Baker, Martin, Finegler and Johnson, and physicians and friends came hurrying from every town in which any of the excursionists had their homes. And there also arrived from Peoria delegations of the Red Men and the Ancient Order of United Workmen, for members of both these societies had been aboard the ill-starred train.

The majority of the injured were conveyed to Piper City, and in this connection occurred an incident which one would almost have thought impossible in any civilised country. For when one of the accommodation trains carrying a number of the wounded slowed down for a bad section of line, the coaches were invaded by a horde of curiosity-seekers, who choked up the aisles and platforms. The conductor appealed to them, saying: "Won't you well people

leave this car to the injured ? They need all the air they can get and must not be crowded. There are others yet to be brought in here." But even this failed to move any except two or three honest Illinois farmers and their wives. But once the poor creatures reached Piper City no stone was left unturned to ease their sufferings. The entire capacity of the little village—for that was all the "city" was in reality—was taxed to the full. The Town Hall, however, was turned into a hospital, and kind-hearted women drove in from near and far to minister to the patients, while on the night following the disaster a mass relief meeting was held in the City Hall of Peoria at the call of Mayor Kinzey and a committee formed to care for them. An army of volunteer carpenters hastily fashioned rough coffins to take the dead excursionists back to the homes from which they had set forth so light-heartedly a few short hours before.

When the report of the wreck spread through Peoria, the Union Depot and the newspaper and telegraph offices were besieged by frantic crowds, clamouring for news of friends or relatives, and amid the confusion there were numerous cases of mistaken identity. One of the Peoria excursionists reported dead was a Mr. George A. Smith, and the body was in due course identified by his brother, brought to the town, and prepared for burial. It may be imagined, then, with what a joyful shock of surprise the "dead" man's family received a telegram from him at Chatsworth, saying that his only injury was a broken leg !

THE IROQUOIS THEATRE CALAMITY

THE IROQUOIS THEATRE CALAMITY

It would be possible, alas, to fill a volume exclusively with narratives of disasters which have overtaken theatre audiences, and to say which should take precedence would be no easy task. The appalling catastrophe which occurred in Chicago at the end of 1903, however, is chosen for inclusion in these pages for a variety of reasons. In the first place, not only was the havoc wrought particularly immense—it involved the loss of 587 human lives and material damage to the extent of \$250,000—but it was also particularly widespread. Whole families were, in the space of a few minutes, completely wiped out of existence, some of them among the wealthiest and most prominent in Chicago. Nor was Chicago itself affected alone ; a great part of the Middle West was plunged in sorrow, for the ill-fated audience had numbered scores of folk from other cities paying New Year visits to relatives and friends. Secondly, this disaster had for its sequel a gigantic scandal. "In the Chicago catastrophe," said *The Times* in a leading article, "the American people had a terrible lesson in the results of corruption in municipal administration. It is now known for certain that the disaster occurred because the city ordinances were not obeyed. Investigation shows that only one theatre in Chicago has been obeying the law, and all the theatres but this one have been closed by the Mayor's order. This state of things means, of course, that officials found it to their interests to wink at the evasion of the law." Cynics may perhaps feel disposed to ask whether this last sentence might not have been written with equal truth to-day in other connections. . . . And thirdly, the Iroquois Theatre affair led to a thorough revision of the safety-precautions taken in places of entertainment not only throughout the United States, but in most European countries as well. As early as

1830 Mr. Braidwood, Superintendent of the London Fire Brigade, had strongly recommended the simple but important precaution of cutting off the stage—with its accompaniments of dressing-rooms, storage premises, paint-room and carpenter's shop—from the auditorium by means of a fire-proof wall and an iron curtain. Yet even in 1903 only a very few municipalities required this to be done, which showed how little attention had been paid to the views of those whose experience best qualified them to make suggestions.

The Iroquois Theatre, which had only been opened as recently as November 23rd, stood at the corner of Dearborn Street and Randolph Street, and at its back ran State Street, often described as the Regent Street of Chicago. It was a magnificent structure modelled on the Opéra Comique in Paris. Built upon steel girders and of fireproof bricks, it possessed no fewer than 40 exits, and was popularly supposed to have all the latest devices for safeguarding human life. But the public afterwards learned—when it was too late—how woefully inadequate those supposed safeguards had been in reality. Not only were the doors leading from the balconies to the emergency escapes much too small, but some of the escapes themselves were not even completed. One was built in the side of the building 50 feet above a stone-paved alley, but there was no ladder by which to reach the ground. Again, the asbestos curtain was of poor material and, as will presently appear, inefficient in operation, while apparently no instructions had been given to the staff regarding the measures to be taken in case of fire. And finally, although there were 40 exits, the audience, when the catastrophe occurred, fought amid the darkness and smoke to reach the light and air through the three or four doors which were the only ones they knew. "It is not sufficient," wrote Mr. Arthur Shean, a consulting fire-brigade engineer, in a letter to *The Times*, "to provide emergency exit doors simply in case of panic, but it is most essential that such exits should be nightly used as the entrance to the seats nearest to them. This is the only sure way of preventing a general rush to one particular door. The public will not stop to read directions with death staring them in the face; they will act upon sudden impulses, which will cause them to go out as they came in."

The show which was being presented on the fatal afternoon was "Bluebeard Junior", a pantomime produced under the management of Messrs. Klaw & Erlanger and playing to crowded houses at both matinées and evening performances. The audience at this matinée consisted of about 1,300 people, a very high proportion of whom were women and children. Until the moment of the catastrophe all was gaiety among them and the delighted laughter of the little ones filled the air. Even when the awful thing began to happen many at first thought it was all part of the show. . . .

Exactly how the fire originated was for some time afterwards not clear, some attributing it to a defect in the electric lighting system, others to the bursting of a calcium tank. The truth, however, emerged in evidence given by William McMullen, an operator employed to work a limelight used during a "moonlight dance". "I was standing on an iron bridge on the right of the stage, from which the light was operated in the middle of the second act," this man stated. "As I changed the lights from white to blue, the arc between the carbons spluttered and struck the frayed edge of the inside border of the curtain drapery, and a flame twelve inches long shot up. I clapped my hands on it, but it spread in spite of me. I then called to have the fire curtain lowered and yelled for help. A house fireman came with a patent extinguisher, which had no effect."

Simultaneously with these happenings, it would appear, the opening of some doors at the back of the stage caused a violent draught, which blew over a large fan-scene containing a number of incandescent lights. This fell with a loud crash which may easily have been mistaken for the sound of an explosion, and no doubt it contributed both to the anxiety of the audience and to the confusion which seems to have reigned on the stage and behind the scenes. As soon as the fire got a hold, 75,000 feet of oiled Manila rope, used in suspending 180 drop-scenes, added fuel of the most highly combustible character to the flames.

It is evident that the amateur firemen on the stage completely lost their heads, their terror rendering them incapable of utilising the fire-fighting appliances to any purpose. W. C. Sellers, one of these men, gave evidence of how he had seen the drop-curtain burning and had directed

fire-extinguishers upon it, but without effect. He tried in vain, too, he declared, to tear the curtain down : the fire spread too rapidly for him to be able to do anything. Meanwhile, others had been told to lower the asbestos curtain.

Unfortunately, however, this was something which nobody could accomplish. Instead of being arranged so as to drop quickly, the curtain was hung with an endless rope, and could only be hauled down with difficulty at the best of times. And, inconceivable though it may seem, this mechanism had failed to work properly from the time when the theatre was opened five weeks before, and had never been put in order. Now, on this all-important occasion, it stuck near the top of the proscenium arch. Expert investigation by Mr. Fulkerson, the City Fire Inspector, revealed afterwards that its descent had been prevented by a steel reflector which some stage-hands had carelessly left open. There was one of these concave reflectors, studded with incandescent lights, on either side of the proscenium arch. Usually they were fitted into niches in the masonry, but when required for use they were swung out in such a manner that the light from the incandescents was thrown on the performers. So long as both reflectors were in place there could be no obstruction in the way of the asbestos curtain, but when either was swung out it must inevitably be caught up. So in this case, while one end of the curtain fell to within five feet of the stage, the other end remained suspended 20 feet above it. The air-draught then caused it to press against the sides of the proscenium, and the stage-hands thereupon abandoned their attempts to lower it and fled for their lives. For a few moments, it is evident from survivors' narratives, the audience completely failed to grasp the peril that threatened, and everything humanly possible was done to avert a panic. The lights, which had been lowered for the "Moonlight Chorus", were turned up, the orchestra struck up a lively air. And nothing short of heroic was the conduct of Eddie Foy, the leading comedian. This man, sprung from an origin so humble that his dialect is said to have been unintelligible to the stalls, was a regular Chicago institution, and if anything could have kept the audience calm it was when he now coolly came forward and began to address the house in his inimitably quaint manner. . . . But to no

avail. The half-lowered curtain made, in conjunction with the open doors in the front of the theatre, a perfect flue. With a hideous crackling roar the flames suddenly leapt forth from the opening beneath the curtain and shot across the auditorium over the heads of the people in the stalls, taking the balcony, so to speak, in their stride. Almost in the same instant came a terrific detonation as the gas-tanks exploded, lifting the entire roof and blowing a storm of flaming fragments high into the air. Then hell was loosed. The audience rose and joined in a frenzied stampede for the exits, fighting like a mob of lunatics to escape at any cost from the vast billows of flame that surged through the theatre like the waves of some fiery ocean. . . .

Graphic accounts of that abrupt transition from careless gaiety to mad panic have been given by members of the audience who somehow came out of the inferno. "One of the actors," relates Miss Plamondon, who was one of a party occupying a box, "appeared before the curtain and requested the audience to keep their seats. I looked at the audience and remarked how many children were present. I could see their faces filled with interest and their eyes wide open as they watched the burning curtain. Just then the people in the balconies arose and crowded forward to obtain a better view of the fire. At that instant a woman in the rear of the house screamed 'Fire !' The entire audience rose and rushed madly from the danger. Few men were in the theatre, but I saw several pulling and pushing women and children aside. I saw a number of children trampled underfoot.

"In the balcony the scene was beyond description. It was a block of human beings apparently fighting each other. The balcony was so steep that many fell before reaching the first four rows of seats. The speed with which the flames ran through the scenery was simply incredible. . . . As I look at it now I must have walked on the prostrate bodies as they struggled at the main entrance, where I saw people fall fainting almost within touching distance of safety. All our party escaped in the same manner, but so bereft of clothing that the first thing we did was to rush to the shops to buy wraps."

Even more terribly vivid is the story told by Mrs. Gleddings, of Drexel Boulevard. She and her little daughter

were seated in the stalls, but by great good fortune both escaped with nothing worse than a few burns and the effects of shock. "The house was in semi-darkness," Mrs. Gleddings tells us, "when a shimmer of light suddenly flashed forth, and the little one shouted, 'What pretty fireworks!' I then noticed that flames were dancing on the scenery, but no thought of danger occurred to me. Then I remarked that on the stage the singers were uneasily looking in the wings, and a confused noise came from behind the footlights. A moment later I felt, rather than saw, the danger. A deadly chill numbed all thought, all action.

"A spell of extraordinary fascination forced me to watch dispassionately the effect upon the audience. When the first small flame appeared, they seemed to look upon it in the same light that one looks upon the constant flicker of a cinematograph—a nuisance to be borne with. Nobody pointed it out to anybody else. And as the flame grew in size the faces became ever more vacant. Then suddenly a child shrilled its delight at the scene, and awoke the people to a sense of danger. I heard a cry of 'Fire!' and saw Mr. Foy gesticulating at the front of the stage.

"Then I must have fainted, but only momentarily, for in a few seconds I was myself again, and now fully alive to the peril. My first thought was for the child, who was bewildered by the sight of the fire and the noise of rushing people.

"Between us and the stage the crowd seemed to have vanished. Behind us was the panic-stricken crowd making for the exits in their death-struggle. The heat was scorching, and the air was suffocating. Taking the child in my arms, I covered her face with my handkerchief, and started to find a way out.

"An explosion accompanied by streams of flame caused me almost to faint again, but steadying my nerves I darted to the side where the way seemed clear, but as I approached the exit I found myself stumbling over the bodies of people who had been trampled to death. Further on I found the way more thickly piled with bodies. Clambering over these, still clinging fast to the child, I crept on. It seemed an eternity since I started, and the fire was gaining fast. I felt my strength giving, but the thought of the child which hung like lead in my arms nerved me for a fresh effort. I

was crawling over dead people, but life was precious, and more precious to me was my child's life. I seemed to squeeze a passage.

"Then I felt a rough hand grasp me by the shoulder. I thought it came from behind, and fearing that some other person was seeking life at the cost of mine, I made a desperate plunge forward. I struggled no more. More hands had gripped me, and I was being hurried out into the street.

"There was a pleasing sense like the awakening from a bad dream, and for some moments, overcome by exhaustion, I yielded to the sensation. But again the thought of the child possessed me, and I clutched wildly at the void—there was nothing. I can't tell you what a pang, what a tearing at the heart-strings I felt. I struggled for breath, and could only sob. 'Where's my child?'

"A voice assured me that she was all right, but after the terrible experience I had gone through I was inconsolable until the girl was brought to my side and I clasped her once more in my arms."

Perhaps the most marvellous escape recorded, however, was that of Winnie Gallagher, a 12-year-old. Alone and without assistance this child made her way *over the heads* of a surging mass of people until she reached the street. In the course of her desperate struggles to get to the outer doors her clothing was practically torn to shreds, and when at last she arrived at a street exit she collapsed in a state of complete exhaustion, whereupon a newsboy standing near by whipped off his coat and used it to protect the fainting child against the bitter air—for the thermometer was below zero. "I saw the fire on the stage," Winnie told afterwards, "and then noticed that everybody had left and I was alone. Then I became frightened and jumped up from my seat and tried to make my way to the door; but there was such a crowd, and they pushed so hard, that very soon I was again standing alone. Then I found I was walking on the heads of people, but I continued to walk over their heads till I reached the exit."

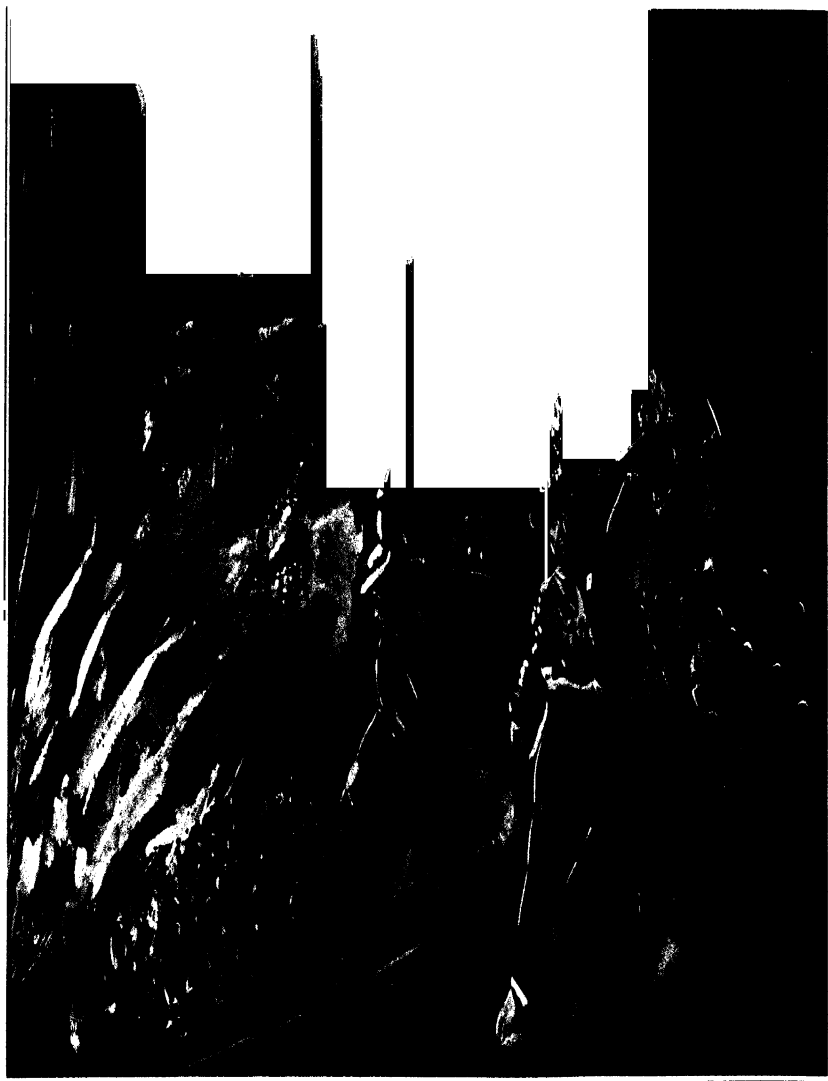
The scene in the balcony and the corridors as the wretched occupants fought to escape from the devastating blast must be pictured, for it cannot be described. "At every exit," states an eyewitness, "the crowd, jostling, edging, fighting,

biting, and shrieking in maniacal frenzy, was wedged tighter and tighter. . . . Those that succeeded in getting into the corridors met others from the other exits, and the same scenes were enacted in a struggle at the stairs."

It has been mentioned already that one of the unfinished fire-escapes was built in the side of the building, some 50 feet above the pavement. This mockery of a refuge rapidly became crowded with women, but gradually the poor wretches were pushed, by the sheer weight of the frantic crowd behind, over the railings to their death on the flagstones beneath. And within a few short seconds those who had borne them down were, in their turn, themselves hurled to destruction. . . . Then at last the occupants of an adjoining building succeeded in bridging the gap with planks and the senseless tide of death at this point was stayed. . . .

And what of the performers in the pantomime? The majority were able, fortunately, to find refuge in an alley behind the theatre. Scores of chorus-girls escaped into the bitter cold clad in their tights, at least a dozen of these owing their lives to the presence of mind of a stage-hand who made them join hands and follow him through a coal-hole to the outer air. But the credit of saving most of the cast belonged to two heroic fellows—Eddie Foy, the comedian, and an elevator-boy who ran his lift to the uppermost gallery behind the scenes to rescue the imprisoned chorus-girls. Terrible injuries, however, were sustained by two English girls of the chorus, who, after almost freezing to death at an open window for fully five minutes, leaped to the ground.

The frightful pandemonium in the burning theatre had drawn a crowd of some 4,000 people, many of whom had relations or friends in the audience. The wildest excitement prevailed, men and women fighting desperately to break through the police-cordon and reach the doors, through which bodies were being carried out by the firemen in unending procession. One who succeeded was the Right Reverend Dr. Muldoon, Chicago's Roman Catholic bishop. Without a second's hesitation this splendid man rushed into the flaming building, and, by almost superhuman efforts, managed to climb into the topmost gallery, "where the dead lay thick and the smoke-laden atmosphere was filled with the



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"With a hideous crackling roar the flames suddenly leapt forth."

cries and groans of the injured. Throwing off his hat, overcoat and undercoat, the bishop took charge of the work of rescue, pausing only to give absolution to each dying Catholic that he reached." But the brave bishop's conduct was only of a piece with a drama that was full of heroism ; doctors, newspapermen and firemen all toiled courageously and indefatigably, and there were many instances of men in the audience who laid down their lives in the attempt to rescue women and children.

One incident there was, however, so disgraceful that one is almost reluctant to set it down. There was in progress a strike of livery-stable drivers. When the victims were being brought out of the burning theatre and every available vehicle was needed to rush them to hospital, one of the employers went to the strikers' headquarters, where the disaffected men had gathered, and implored these to drive his carriages to the theatre and assist in the removal of the injured. They flatly refused. The one partially redeeming element lies in the fact that next day the strikers' leader declared a truce in order that the dead might be decently buried.

The ghastly struggle at the theatre had been in progress for nearly 10 minutes before the first squad of firemen arrived on the scene and got a hose to work on the flames. Their task was one of almost insuperable difficulty. In the first place, as already mentioned, the cold was intense—so much so, in fact, that the streets were converted into sheets of ice by the water from the fire-engines. Moreover, when the fire-escapes were reared the crowding was so great that numbers of people were precipitated to the ground and killed. Indeed, the astonishing thing is that the firemen succeeded in saving so many lives as they did ; many people on the top balcony were actually only rescued by running ladders up to the roof. And again, the doorways and passages were so thickly choked with bodies that the fire-fighters could only gain entrance to the building by scrambling over the top of them. "We could not bring ourselves to believe," told one fireman afterwards, "that the strange-looking heaps which blocked for yards in length the way to the various exits were composed of the remains of human beings. Some of us actually set to work to dig at the masses

under the impression that we were removing the wreckage of the seats and barriers."

Terrible sights met the eyes of the firemen when they entered the theatre. Scores of victims were discovered dead in their seats, having apparently been asphyxiated at the time of the explosion of the gas-tanks. "Near the stage," states an eye-witness, "a whole row of seats was filled with dead women whose heads were hanging on their breasts. Nearly every chair in the balcony held women in a similar position. A blast of flame and gas from the stage like that from Mont Pelée* had killed them before they could move."

And here is another first-hand account of that awful gallery of death: "When the firemen entered the building they found lifeless women tightly wedged in three-deep between the seats. . . . The dead reached from the head of the stairway, at least eight feet outside the door of the balcony, to five feet inside. The mass of bodies in the centre of the doorway reached to within two feet of the ceiling and of the passageway—all those of women and children. . . . The women on the top of the mass had been overcome while crawling on their hands and knees over those who had died already. Others lay with their arms stretched out in the direction of safety, holding in their hands fragments of garments evidently torn from the clothing of others whom they had endeavoured to thrust aside. The dead were so tightly jammed between the sides of the door and the walls that it was impossible to lift them singly, and it was necessary to seize a limb and pull them out by sheer force. . . . In the aisles of the balconies the dead were in a number of places piled up three or four feet deep. In the aisles nearest the doors the scenes were the most harrowing. The bodies lay in every conceivable attitude, mostly half naked, the faces revealing some of the agony that had been suffered."

In endless procession the host of injured were carried out of the building, but the majority expired before it was possible to get them to hospital. As for those already dead before removal, their bodies accumulated so rapidly that it was necessary to pile them two or three deep on the sidewalk,

*See *Great Disasters of the World*, pp 217-228.

for almost at once the city morgues were filled to overflowing. For a while a great quantity of corpses were housed in the premises of the Chicago Real Estate Company, which adjoined the theatre, but presently it began to look as though the walls of this structure might at any moment collapse, and the firemen accordingly decided to empty it again.

Meanwhile, 50 doctors and a regular army of trained nurses had come post-haste to the scene and were caring for such of the injured as were not beyond human aid. Their efforts were immeasurably assisted by a number of the larger dry-goods stores, which sent loads of blankets and linen, and of cotton for bandages, besides placing their wagons at the disposal of the authorities. But not all those who busied themselves with the victims were intent on the work of mercy. More than a dozen thieves and pickpockets were arrested on the charge of robbing the dead and injured.

Next day a coroner's jury examined the theatre, and it is on record that they wept at the sight of the pitiful relics with which it was strewn, mute reminders of the unfortunate people who had lost their lives. There were enough articles of clothing, handkerchiefs and overshoes to fill several barrels; there was a doll which had evidently been given to some little girl for Christmas, there were articles of jewellery bearing inscriptions which showed they had been holiday presents from young men to their sweethearts. . . .

The task of identifying the dead—they were mostly women and children—was one awful and, in only too many cases, fraught with extreme difficulty, for clothing had been torn to rags or burnt to cinders, faces had been trampled out of all recognition. . . . One curious circumstance observed was that in the attitudes of the bodies there was a strange uniformity. In nearly every instance the left arm was held stiff and close to the side, while the right arm was stretched out as though in the attempt to ward off the advancing peril of the fire-storm.

Many were the heartrending episodes that came to pass during that sad work. Dr. Alexander, for instance, after ceaselessly searching for hours for his eight-year-old son, at last found a headless little body which he recognised by a watch he had given him on his birthday. A Mr. Edwards, a visitor to Chicago from Iowa, identified the body of his

daughter, a little girl of 14, by a sample of the cloth of her dress which he carried from mortuary to mortuary. Mr. Frady, a piano-manufacturer, found the bodies of five out of six of a party his wife had taken to the theatre. A Mrs. Stoddard, who resided in one of the suburbs, had brought her son and daughter to Chicago for the holidays and bought three seats for the fatal performance. Fortunately for her, she became too indisposed to attend it, and now, while she lay in her hotel in a semi-conscious state, friends sought for and found the bodies of her children. Then there was Mr. McLaughlin, a nephew of Dr. Gunsaulus, the famous preacher. This luckless young man had been spending a college vacation in Chicago in order to attend the wedding of his cousin, Dr. Gunsaulus' daughter, but in the theatre disaster he received injuries which proved fatal.

One of the very few non-Americans who perished was Miss Nellie Reed, a London member of the aerial ballet of the "Bluebeard" company. Miss Lola Quinlan, another member of the company, related how, after the outbreak of fire, she found Miss Reed paralysed with fright on the stairs leading from the dressing-rooms over the stage. She conducted her through the blinding smoke to the ground floor, where the firemen took charge of Miss Quinlan. Miss Reed, however, apparently out of her wits with terror, made her way back to the blazing stage, where she was so seriously burned that she subsequently died of her injuries.

The total number of lives lost in this fearful calamity was no less than 587. On January 2nd, business was to all intents and purposes suspended in Chicago. The church bells tolled monotonously ; through the streets moved long lines of funeral processions on their way to the outlying cemeteries. Often there were two or three members of the same family to be buried together. The priests and ministers of the various denominations were kept busy all day, going from funeral to funeral.

President Roosevelt lost no time in telegraphing his sympathy to the Mayor of the stricken city. Other messages of condolence came from the Prince and Princess of Wales, the Kaiser, and every other ruler in Europe, while the sympathy of the Lord Mayor of London, the London County Council and the Liverpool Chamber of Commerce was

conveyed to Mr. Choate, the United States Ambassador to England. Relief Funds were opened, to which Sir Thomas Lipton and many other prominent people contributed generously, and a special concert was given at Queen's Hall in aid of the relatives of the poorer victims.

A sensation was caused when it became known that immediately after the catastrophe seven employees of the theatre, namely, the stage-carpenter and the stage-hands and scene-shifters, had been arrested on a charge of being accessory to manslaughter. Next day Mr. Plunkett, the assistant stage-manager, was also taken into custody, charged with manslaughter, while four male and two female members of the "Pale Moonlight" chorus were held as witnesses. By January 2nd the arrests totalled 27, but \$5,000 bail was accepted for all of them.

On the very night of the disaster the coroner's jury took evidence in connection with the outbreak of the fire, after which the inquiry was adjourned for a week. It was announced that the questions they would then have to find answers to were as follows : (i) Were the steel doors locked when the outbreak occurred ? (ii) Were these doors opened promptly by the attendants ? (iii) Why was it impossible to lower the asbestos curtain ? (iv) Why was no provision made to prevent the lights in the flies from igniting the curtains ? and (v) Why were the doors shut and the people urged to remain seated ?

Meanwhile, Mr. Harrison, the Mayor of Chicago, on January 1st ordered the closing of 19 theatres which had not, it was alleged, complied with the regulations in force for the prevention of accidents. And within the four days following another drastic step was taken—the compulsory closing of no less than 400 public halls, pending investigations to ascertain whether or no the building laws had been complied with. Moreover, not more than two or three days had passed before it was announced that the following new regulations would forthwith be strictly enforced in Chicago : all theatres to be provided with steel roller curtains and wide exits ; no combustibles of any sort or description to be allowed in any place of entertainment ; scenery to be made fireproof ; skylights to be provided over the stage, fitted with automatic lids, so as to afford

egress to smoke in case of need ; gas-jets to be enclosed in wire netting ; separate stairways to be constructed to each exit, giving direct access to the street ; no calcium or "spot" lights to be used on the stage. The managers of the leading theatres held a meeting at which they resolved unreservedly to observe these rules in every respect.

The nervousness of Chicago audiences following the calamity was well illustrated by an incident which occurred during the funeral of one of the victims. A fire broke out close to the church. No sooner did the mourners hear the resultant shouting than they leaped to their feet and made a rush for the open—so wild a rush, indeed, that the police were powerless to stay it, though, by the mercy of providence, no one was hurt.

On January 9th, the relatives of the victims held a mass meeting to decide upon taking concerted action in order to establish responsibility for the disaster and obtain the punishment of any persons who should be found guilty of criminal negligence. Already the management of the theatre had admitted, as previously stated, that no instructions had been given to their staff regarding measures to be taken in case of fire ; and, what was more, they had further admitted that all the 11 emergency exits had remained locked during the panic.

A fortnight passed, and then the pressure brought to bear by public feeling took effect, for the coroner's jury returned a verdict ordering the arrest of Mr. Carter Harrison, the Mayor, of Mr. Musham, chief of the Fire Department, and of Mr. Williams, the Building Commissioner, together with the manager of the theatre, a building inspector, and three employees. Harrison was held responsible for failure to enforce the laws, Williams and Musham for gross neglect of duty in not exacting obedience of the city ordinances. It would be impossible to exaggerate the bitterness of public sentiment against the city administration, and the foreign Press was moved to the expression of caustic comments. The weighty observations of *The Times* in this connection have already been quoted.

The salutary effects of the disaster upon theatre-management were not, however, confined to Chicago. Managers throughout the length and breadth of the United States took

immediate and far-reaching precautions against fire, and the Fire Commissioner of New York declared that if on investigation a lack of safety was revealed in any theatre or dance hall, that establishment would instantly be closed. Moreover, the catastrophe led to a close examination of existing conditions in most countries of Europe. The results in Berlin were a revision of the safety-precautions of all its theatres and extensive alterations to the Royal Opera House. As for English houses of entertainment, Mr. Edwin Sachs said in an interview that, although there had been an enormous improvement in the safeguards in London theatres during recent years, he would like to see greater insistence upon clear, straight routes of exit. Many of the provincial theatres, he added, were still in a very bad state, and he concluded by expressing a hope that the Chicago disaster would not lead the London playgoing public to fall into a nervous state, since the possibility of panic was thereby increased. The public should remember that the presence of mind of the English actor and stage-hand was proverbial throughout the world, a fact which explained why many small fires which elsewhere would have led to disaster had been put out without fuss or excitement.

In the letter to *The Times*, to which reference has already been made, Mr. Arthur Shean went on to write as follows: "Where any theatre in London is playing a popular piece, it is the custom nightly to be informed at the pit door when inquiring for seats, 'Standing room only,' and the pit is crammed up in such a way that loss of life is an absolute certainty in case of panic. This is a nightly occurrence at any of our leading West-end theatres, and I can only say it is a scandalous disregard of public safety." This expression of views led to a considerable polemic in the correspondence columns of *The Times* between Mr. Shean and Mr. Alfred Moul, who took up the cudgels on behalf of the Alhambra Company.

The suggestion was made by English insurance experts that the Chicago fire should direct attention to the essential points of fire prevention and extinction in theatres—namely, fireproof curtains worked by power from the auditorium side and fitted with sprinklers; an automatic sprinkler installation above the stage; the use of stage materials

rendered incombustible by chemical means ; a permanent staff of trained firemen ; provision of ample exits, gradually widening outwards and without sharp angles or corners. "The multiplication of exits without an efficient curtain," added this report, "simply increases the draught feeding a fire and causes the interior of a fireproof building to burn like hay in an iron basket." Exactly thus were the wretched beings trapped in the Iroquois Theatre on that fatal afternoon consumed : "like hay in an iron basket. . . ."

**THE HOOK OF HOLLAND
CATASTROPHE OF 1907**

THE HOOK OF HOLLAND CATASTROPHE OF 1907

It was in 1893 that the Great Eastern Railway Company inaugurated the Hook of Holland route to the Continent, and with every year that followed its popularity steadily grew. During 1905 and 1906 it was used by 100,000 people yearly, and the Company could claim with justifiable pride at the beginning of 1907 that since the inception of the route it had carried 1,200,000 passengers without the loss of a single life. And then, no later than in February of that year, came disaster, swift and overwhelming.

The *Berlin*, a first-class mail steamer of 1,775 tons and 5,000 horse power, built in 1894 and reboilered and generally overhauled only a few months before the events about to be described, left Harwich for the Hook of Holland on the night of Wednesday, February 20th, with a human freight of some 150 souls. Among these were nineteen members of the German Opera Company, which had on the previous Saturday finished its season at Covent Garden. One very eminent singer it included was Fräulein Schöne, of the Mannheim Court Opera. Also in the passenger list was the name of Mr. Arthur Herbert, a King's Foreign Office messenger, carrying despatches for Copenhagen, Berlin, St. Petersburg and Teheran. It was remembered afterwards that Mr. Herbert had cut his time rather short, and that an official who saw him off from Downing Street had remarked with unconscious irony that he would be lucky if he caught the train: unhappily for him, the King's messenger did have that luck. Another passenger was G. F. Rollason, a well-known jockey, who was travelling to Holland under orders to ride for Mynheer Katendyke. It had been his intention to ride for Mr. Perkins in the Avon Selling Plate at Warwick that day, but he had left early for Holland after all because he had, as he put it—ironically,

too, had he but known it—"decided to take no risks". Plant, the Newmarket jockey, who was Rollason's brother-in-law, was to have accompanied him, but at the last moment his wife had received a telegram to announce the death of his grandmother at Tunbridge Wells, so the Plants had gone there instead. With Rollason did go, however, his father, who was the driver of a four-in-hand coach running between Leamington and Stratford-on-Avon.

The *Berlin* had a terrible crossing, experiencing the full force of one of the most violent north-westerly gales ever known in the North Sea, that notorious region of severe storms. Not that there was necessity for anxiety, however : Captain Precious, the master of the ship, was one of the Company's three commodores ; he had been in its service for 26 years, 14 of them as a captain, and had in the course of his long career made this passage many thousands of times in most sorts of weather.

In the early hours of the morning the vessel arrived safely off the Hook, and anyone who has experienced a bad crossing may easily imagine with what relief the passengers viewed the shore lights, hugging the thought that within another half-hour or so they would again tread solid ground. Happily for their peace of mind it was not for them to know that Captain Precious, the seaman of unblemished reputation, was now about to commit the one blunder of his long career, a blunder destined to cost his own life and more than 100 of the lives entrusted to his care. . . .

Such, at all events, was the finding of the Court of Inquiry which sat later to determine the responsibility for the *Berlin's* fate. It was emphasised that the gale had been causing a perilous breaking of the sea in the neighbourhood of a gas-buoy which was situated nearly a mile out to sea, but that the ship had passed that buoy at a speed of 15 or 16 knots ; in short, that the captain "had been guilty of an error of judgment in trying to enter the waterway in the condition of weather then prevailing".

A word must be written about the waterway in question. This was the so-called "New Waterway", an artificial channel about four miles in length, leaving the River Maas north of Maasluis and forming the entrance from the North Sea. It was some 800 yards across, but of varying depths, and for

a vessel as large as the *Berlin* there would be only a width of 200 to 250 yards available. The banks of the waterway were continued by two piers which ran out to sea for over a mile. The North Pier was built of heavy rough stones packed in between timber piles on either side, and this rude stonework was carried seaward under water from the pierhead to act as a breakwater. Such was the "New Waterway", and through it passed the whole of the sea-going shipping to and from Amsterdam, representing an annual net tonnage of between 8,000,000 and 9,000,000 tons.

At the point of entrance the tides ran very strongly north-east or west-north-west, dead across the mouth of the waterway, with the consequence that a ship making for the Hook of Holland mail-boat station, which lay some two miles up the channel, had to make full allowance for this rapid lateral flow. Indeed, it was through getting caught by the powerful tide that the Batavier Line's ship *Holland* had been lost on this very spot six years previously. And—to quote the Court of Inquiry's verdict again—it would seem that Captain Precious, having already transgressed gravely by deciding to enter the waterway, committed a further serious error "in under-estimating the effect of the send of the sea and force of the tide on the vessel when he did make the attempt".

"We passed the gas-buoy," relates Seaman W. Fisher, "and then a heavy sea struck the *Berlin* on the port quarter and canted her towards the North Pier. The captain gave orders to the engine-room: 'Stop starboard,' 'Full speed astern starboard engine,' and 'Full speed ahead port engine.' Then the *Berlin's* head began to come round to the southward, but directly afterwards another heavy sea struck her, and that lurched the vessel on to the piles." Captain Parkinson, who was travelling as a passenger to Amsterdam, where he was to take over command of the Ocean Steamship Company's vessel *Myrmidon*, describes the night as terrible, and says that never in all his sea experience had he seen such weather. So ugly was it, in fact, that he had remained on deck all night completely dressed. "The *Berlin*," he states, "was already near the light at the North Pier, and the passengers, many of whom had not gone below, had begun to breathe

freely again after their terrible crossing when the ship struck. A violent shock was felt." In point of fact, had the *Berlin* been only a few yards farther to the westward, the disaster would probably not have occurred. But as matters were, she was lifted bodily on a terrific sea and dropped across the submerged breakwater almost at its extremity. Once on the stones, she could not get off again, and there she lay helpless, bumped repeatedly on the cruel stonework. "Even an ironclad could not have had such an experience and have survived," observes Captain Howard, then the Marine Superintendent at Parkeston Quay, Harwich. And survive it she did not.

For a while she held together, it was true, and during that interval the ship's personnel calmly and courageously busied themselves with doing what little there could be done for the safety and comfort of the wretched passengers. "The crew could not get to the boats, which were all smashed in five minutes," continues Fisher. "The second mate came rushing up to the bridge and asked for orders. The captain said, 'Go down and tell all hands—passengers and crew—to put on lifebelts.' They all did put lifebelts on, the crew assisting the passengers." One more order the captain gave—the order "Ladies first, remember," and so far as is known those were the last words he ever uttered. "As an experienced seaman I hurried to the bridge to offer the captain my help," relates Parkinson, "but just as I put my foot on the ladder I saw him and the pilot swept away by the sea and they disappeared." Lifelines were stretched along the decks, but, despite these, passengers also were from time to time washed overboard.

At about 8 a.m. the doomed ship succumbed to the incessant battering of the mountainous seas and broke in two amidships at the engine-room and behind the funnels. The fore-part slid down the breakwater on the inner side, and, turning a little towards the east, sank at a point some 70 or 80 yards away, carrying with it all who were in or on it; the after-part remained partly above water, firmly embedded on the stone breakwater.

About this time or a little earlier the steamer *Clacton* arrived on the scene, and those aboard her were helpless witnesses of those dreadful moments when the *Berlin* broke

asunder. "We could see the passengers and crew crowded together on the deck of the doomed ship," says Captain Dale, master of the *Clacton*, "and some of them made a dash together to the aft part of the vessel. Just as the frightened creatures made their rush—I suppose they heard the cracking timbers—the *Berlin* fell in two. Then shortly afterwards the fore funnel crashed into the sea, and all I could see was the aft portion. In a few minutes more the aft funnel went over, and all that appeared was the stern. One huge wave seemed to take all the persons aboard her in a mouthful, as it were. But there were still a number clinging about the stern. I could actually hear their cries, and I could see several of them clinging to bits of wreckage in the water."

A few minutes later, when the majority of the surviving passengers and sailors were standing huddled together on this aft portion, there came rolling over it another tremendous sea which at one swoop carried away the look-out bridge, the captain's house, the boats, and probably not less than three-quarters of these unfortunate human creatures.

The shore was by this time black with thousands of spectators watching in impotent fascination this dreadful drama of the sea as stage by stage it unrolled itself before their eyes. From where they stood they could see the mast of the sunken portion of the *Berlin* sticking up forlornly from the waterway, the huge seas breaking right over the truck, and the unsubmerged part of the stern with those black forms clustered upon it—dead or still living? Already the sea was flinging up wreckage at their feet: bits of splintered woodwork, muffs, fragments of apparel; already a grimmer harvest was to be seen coming shorewards among the crashing breakers, bodies that tossed hither and thither aimlessly for a while, then presently were flung on to the stonework and battered and disfigured beyond recognition. And from the jetsam and the flotsam came dramatically the answer to the pressing question of the hour—a despairing appeal for help scrawled in copying-pencil on a piece of drifting plankwood, help for 15 fellow-creatures imprisoned in the wreck. The pitiful missive was dated "Smoking-room. s.s. *Berlin*."

No time was lost in attempting the rescue of those poor people from their desperate plight, and it is a notable fact

that the very first man to volunteer was Able Seaman J. W. Precious, the eldest son of the *Berlin's* captain. The Hook of Holland steam lifeboat, *President van Heel*, a splendid, English-built craft with a record of 336 lives saved, and commanded by a fine fellow named Captain Jansen, made the most desperate efforts all day long to reach the wreck, but in vain. Several times the lifeboat and the tug which accompanied her were flung back on the shore. Thrice was communication established, but each time the lifeboat lost her anchor and hawsers. Once, indeed, she came within 10 yards of the *Berlin*, and those in her could actually hear human cries, but the boiling sea at the entrance to the channel made further approach impossible, and once more she had to put back.

But if those long hours of fruitless effort were charged with intolerable anxiety for the crew of the lifeboat and the watching throng, what must they have been for the terrified wretches clinging to the wreck in the deadly cold, foodless and without drink, their frail refuge shuddering perpetually under the impact of the pounding seas? About five and twenty of them there were at the outset, but speedily their numbers thinned as, one after another, they died of exposure or were washed overboard. "They were all forward under the saloon deck-house," Seaman Fisher tells us in his unimpassioned way, "and lots of them had blood on them from injuries caused by falling boat-skids. By the side of the smoke-room was the only shelter we could get, and we were all huddled together there. The sea washed right through between the engine-room alley and the smoke-room, and as the smoke-room could afford no shelter they had to get to the engine-room skylight, which in the case of the *Berlin* was carried up through the boat-deck. We remained there till rescued on the Friday afternoon.

"The ladies were very brave indeed. They kept cheering us up, and it was in a great measure due to them that our hearts did not fail us. There was no panic or anything which anyone could dream of calling a panic. . . . We called out to every ship that passed.

"Bullock, Britten and Carter" (members of the crew) "volunteered to go below to attempt to get to the store-room so as to bring to the women a portion of brandy.



HOOK OF HOLLAND CATASTROPHE

"Every wave that struck the *Berlin* . . . made her sway."

But below every place was full of water and they had to give it up. Bullock lost his life in returning. . . .

"We suffered terribly from thirst. The ladies suffered as much from the biting cold of the blizzard"—there was a heavy snowfall—"and the violent seas as we did, but when the men's hands began to be frostbitten they unbuttoned their bodices and placed them next their breasts."

Gallant women of the German Opera Company! "I was so hungry," Fräulein Gäbler told afterwards, "that I was obliged to have something in my mouth, so *I ate some paper I had with me.*" Fortunately Monsieur Henri Jaboulet, a French wine-merchant, had a few peppermints, and these he shared out among the women. "The German ladies," we are told by Carter, a steward, "kept together in a little knot, taking quarter-hour turns sitting on one another's laps for warmth. They behaved splendidly and sang hymns and other music. . . . When the tide rose and the waves broke over the midship section and washed our legs, we sat on dead bodies to keep out of the constant stream of water. . . . I saw one old gentleman washed overboard. Then a great wave dashed him back on deck, head first, and the top of his skull was literally sliced off. Some of our little group were killed by wreckage borne on the waves, wreckage which struck them like great spears. The waves dashed our clothes off. We had nothing to eat during the last thirty hours."

Mr. Emil Young confirms Carter's story about the singing. "We sang Luther's hymn, '*Ein Feste Burg ist unser Gott*,'" he says, and goes on to inform us that: "One part of the deck was better sheltered than the rest. I got there, and a man called 'Let this lady come there!' I did not at first, but later I moved. The man, however, took her place, and that annoyed me." Not unnaturally! "I slapped his face, and he said no more, as I threatened to throw him overboard."

Lastly, let us consider the narrative of another of the German girls, Fräulein Schroeder. "Our anguish," says she, "reached its height on Thursday night. The gale seemed fiercer than ever, and the mountainous, death-cold billows broke over the ship every minute, and the dense, blinding blizzard hid the comforting lights of the Hook from us. At about 5.30 a.m. we heard the siren of the incoming Great

Eastern steamer *Vienna*, and Miss Büttel in a frenzy of despair shouted to the howling winds, '*Wir sind hier . . . !*' I saw nearly all my friends carried away by the sea and drowned. We watched the operations of our rescuers with breathless anxiety, but when we finally saw that there was a chance of life, exhaustion, exposure, hunger and fear had made us so miserable that even joy of life brought no smiles to our faces and no words to our lips."

Up to this point there had come ashore just one living survivor from the disaster, and that was the redoubtable Captain Parkinson, who, after being swept into the sea at the time of the *Berlin's* breaking in two, recovered consciousness to find himself in the water surrounded by floating timbers. One of these he seized, and managed to keep afloat until he saw the lifeboat approaching. His cry for help was heard and he was picked up. All around him, he related, he heard the stifled cries of the drowning, and was continually swept against floating corpses.

All efforts to reach the *Berlin* on the 21st having proved fruitless, the *President van Heel* next day made three journeys accompanied by tugs and pilot-boats, in one of which, the *Helvoetsluis*, went no less a personage than Prince Henry. The weather at first was fairly good, but soon after the departure of the rescuers came blinding snow that blotted out all view of the wreck and rendered it impossible for the lifeboats to do anything. After half an hour, however, the snowfall ceased, and a boat was then lowered from the *Helvoetsluis* and towed as far as the beacon at the end of the North Pier. Six men of the boat's crew mounted the iron light-tower, and, after several fruitless attempts, contrived at last to throw a rope to the deck of the wrecked vessel. This was made fast, and then, through the blinding snow-storm, the survivors slid down it in turn and landed on the pier—uncovered again now that it was low tide. Eleven there were who passed thus to safety, but three poor women yet remained aboard, too utterly exhausted to make the effort necessary to save themselves—Frau Wennburg, Fräulein Thiele and Minna Rippler, a maid—and these it was determined to rescue in the evening, for the turning of the tide made it necessary now for the lifeboats to return to shore.

But the crews had been at work without cessation for 36 hours, and one man at least there was who made up his mind that they had done enough. This was Captain Martein Sperling, of Dordrecht, whose ship was then at the Hook. He arranged with the owner of a tug, the *Wodan*, to make an attempt before the wearied lifeboatmen started again, and an hour before midnight, accompanied by two nephews and a friend, he was on his way to the wreck, bringing a flat in tow.

Stopping near the breakwater beacon, the men got on the flat and moored it to the light-tower, then climbed up the rope employed for the rescue of those already saved. They found the women still alive, but, except the maid, with their feet so badly frostbitten as to be incapable of standing up.

Let the gallant Sperling tell in his own words the story of the rescue: "Every wave that struck the *Berlin*," says he, "made her sway, slacking the rope until I dropped near the water. I was not long getting on deck under the boat-deck . . . I could just see a heap of human beings lying in all sorts of attitudes. I heard a little moan, and found a breathing woman lying partly on a seat and partly on a heap of dead. She was practically unconscious as I tied a bowline under her armpits, made fast a loop over the rope fixed to the lighthouse and another rope round her waist.

"Cornelis had got to the lighthouse by this time, and I lowered her down into his arms. All the time the wreck was swaying, and the sagging of the connecting rope lowered the poor woman until the waves passed over her waist, but she reached Cornelis all right . . . Frau Wennburg tried to make me understand something while I was fastening the lifeline round her. Although at the time I could not understand her, she was referring to the body of her three-year-old child, which was among the little heap of dead. I lowered her down to Cornelis safely enough but her skirt caught in a wooden stake, and Cornelis and she were swept by two or three waves and nearly washed away before he could release her and lash her to the lighthouse. The rescue of the third woman was easy and without accident."

By the 23rd 50 bodies had come ashore. To accommodate the first few of the dead the railway station had been turned into a temporary mortuary; but as the grim tale of

the dead mounted up more spacious quarters became necessary, and they were then laid out in the Holland-America Line's dockyard, prior to being shipped to Harwich. It was remarked that the majority of them wore lifebelts, proving that the crew had faithfully carried out their duty to the passengers. Another noticeable circumstance was that most of the dead faces bore no indication of suffering, but were suggestive rather of a deep and untroubled sleep.

Space does not permit of any attempt at a comprehensive list of those who lost their lives in this appalling disaster, but a few names may be mentioned in particular. Among these must certainly be that of Chief Steward Moore, who was found still clasping in his arms the body of August Hirsch, a little boy who had been entrusted into his care. So popular a figure was Moore that the Great Eastern Officials received more than 200 letters and telegrams inquiring after him from all parts of the United Kingdom and the Continent. The dead also included the King's Messenger already mentioned and the two Rollasons. Yet others were Messrs. A. and H. Lamotte, the former a member of the firm of Clagett, Brachi and Company, tobacco brokers, of Crutched Friars, the other a member of C. Fry & Sons; a young man named Grosswendt, in business in London, who was on his way to Cologne in response to a telegram announcing the dangerous illness of his mother; Mr. Charles Brockett, a West Hartlepool consulting engineer; Mr. C. W. B. Anderson, formerly manager of the North-Eastern Railway Company's grain department at Hartlepool; Mrs. Serabski, of Liverpool, travelling to Rotterdam to see her dying father; Mr. W. M. Reeves, Secretary of the Lankat Plantation Company; Mr. F. Salt, a partner in Moxon & Salt, shipbrokers; Mr. G. Helfenstein, consulting manager to R. W. Greef & Co., chemical merchants, of Eastcheap; Mr. Frederick Holden, of Bolton, an expert in bleaching machinery; and Mr. R. Frankenburg, a son of the Mayor of Salford. Captain Precious, who lived at Dovercourt, left behind him seven children; Benjamin Catchpole, one of the firemen, left a widow and the same number of little ones, and the Chief Steward, Chief Saloon Steward and Second Cabin Steward each left a widow and six children.

Now that all living survivors were for certain rescued, the Dutch authorities required the Great Eastern Company to clear the wreck of the remaining dead without further delay. The same day, accordingly, a tug went out with a staff of nurses with disinfectants and the dismal task was carried out. In the tug went the Governor of the province, the Attorney-General for Holland, the burgomaster, the Medical Officer of Health, Mr. Busk, Continental Manager of the Great Eastern, Captain Howard, and Mr. L. Pieters, representing the agents. The visitors beheld ample evidence of the fury of the seas ; every bit of furniture in the smoking-room was literally smashed to atoms, the doors and staircases had vanished, the ventilators were battered flat and the steampipes twisted into fantastic knots.

There was no delay in raising money for the benefit of those who had lost their lives. The first relief fund was opened by the Mayor of Harwich, Mr. W. H. Elwell. On the Rotterdam Bourse a sum of £1,000 had been raised as early as the 23rd in recognition of the lifeboatmen's services. The Railway Benevolent Institution offered to give free education at its school at Derby to one child from every bereaved family, and an offer to relieve any necessitous cases came from the Shipwrecked Mariners' Association. British singers started a fund to assist dependents of the German Opera members, and Mons. Claretie, the manager of the *Comédie Française*, obtained permission to hold a special performance for the same purpose. A similar project, too, was undertaken by the Palace Theatre management, who organised a special charity *matinée*, the performers in which included Hayden Coffin, Vesta Tilley, Evie Green, Harry Fragson, Edna May, Louis Bradfield, Gertie Millar, Ada Reeve, Marie Dainton, Marie Lloyd, Camille Clifford, Courtice Pounds and Harry Lauder. The occasion was made specially interesting by the appearance on the stage of Captain Sperling, Captain Jansen, and Captain Berckhout, the commander of the pilot boat.

The three above-named stalwarts, it is gratifying to add, were presented by Queen Wilhelmina with the gold medal of the Order of the House of Orange, while all members of the crews who had helped in the work of rescue received the silver medal of the same Order. Lloyd's awarded their

silver medal to Jansen, Sperling, and two others, Jan van Rees and Klaas Rees. The committee of management of the Royal National Lifeboat Institution placed on record its "admiration of the gallant and splendid bravery of the crews of the lifeboats belonging to the South Holland Lifeboat Society" and its thanks to Captain Sperling and his brave companions. As for Prince Henry of the Netherlands, who had accompanied the party which brought off the first eleven survivors, King Edward VII presented him with the Grand Cross of the Order of the Bath. But of all the tributes paid, none, I think, was more eloquent than the action of a man who had booked a passage by the *Berlin* but had been prevented from sailing, and who handed in an anonymous donation of £75 to the Lord Mayor's Cripples Fund as a thank-offering for his safety.

It is notorious that on occasions of heavy calamity the wildest rumours are liable to spring up and take flight on the winds of popular credulity, and the loss of the *Berlin* proved no exception. Certain newspapers circulated a cruel story of Dutch fishermen having been observed pillaging the dead under the very eyes of the local police. The plain fact was that the "pillagers" were plain-clothes policemen acting under instructions to remove articles of value for identification purposes, and much pain might have been saved had those responsible for such a wicked slander taken the trouble to check their facts.

In conclusion, we may notice that the salient characteristics of the circumstances which attended this grievous calamity were absence of panic and steady devotion to duty. Of this last there were instances innumerable—the heroic conduct of the Dutch lifeboatmen and their helpers, Captain Precious' sole thought for his passengers and crew, the stoical fortitude of the German women, Bullock's sacrifice of his life in order to obtain brandy for the women passengers, and, doubtless, many another action of equal nobility that never found its way into print. As Mr. Arthur Cohen, K.C., observed at the Inquiry, "The best proof that those who were most responsible felt and discharged their duty is that they died at their posts," and nobody was likely to contradict Baron Schimmelpenninck van der Oye, President of the First Chamber of the States General, when he declared that

“The rescuers have shown that ‘Dutch courage’ has a significance of which we may well be proud abroad.”

The sole criticism uttered against the Dutch Lifeboat Society, I fancy, was one put forward in the report published by the Board of Trade, which expressed regret that the lifeboatmen did not appear to have carried a supply of oil as a means of smoothing the surface of the sea. Of criticism against the inadequacy of life-saving apparatus in general, however, there was plenty and to spare in the correspondence columns of the Press, the most noteworthy contribution being a letter from Lieut. T. A. Bosanquet to *The Times*, in which he described as disgraceful the fact that all the best of the world’s inventive genius was turned towards perfecting means of destruction, merely because there was more money to be had out of these than from devices for the preservation of life. But from the *Berlin* catastrophe there did emerge, in contrast to mere words, at least one progressive measure, for questions were asked in the Dutch Second Chamber which led to it being made compulsory for all ships of more than 200 tons gross to carry rocket apparatus.

THE VALPARAISO EARTHQUAKE TERROR

THE VALPARAISO EARTHQUAKE TERROR

FOR a very considerable distance along the coast of Chile the slope of the Andes down to the ocean-bottom is so abrupt that, geologically speaking, it may be termed almost precipitous. Wherever that slope is as steep as 1 in 20 over a long stretch of coast—say 120 miles or so—we get a region which is essentially unstable and constantly yielding, and when the yielding is sudden and irregular the inevitable result is a big earthquake. How frequently such disturbances have ravaged Chile a glance at its history is sufficient to show, and there is abundant evidence, too, as to their severity. After the 1882 earthquake, for instance, it was found that the coast had risen three or four feet, and we may judge how completely and rapidly the coast-line has been altered in comparatively quite recent times by the fact that sea-shells of existing species are found at very great heights in the Southern Andes.

The city of Valparaiso, a typically picturesque old Spanish town stretching along the shores of a semicircular bay and straggling back over the steep slopes and valleys of the enclosing hills, had, in 1906, a population of about 180,000, and enjoyed an annual trade of some £10,000,000, a very high proportion of which was in the hands of the large resident British community, the Germans coming a good second. Unless the beholder kept well in mind the city's ominous record in the past, he would have found it difficult to connect with impending catastrophe the spectacle of that placid crescent of white and pink and blue buildings basking so peacefully in the strong South American sunshine. Yet one at least there was who was not deceived—Captain Cooper, of the Pacific Steam Navigation Company, a man well-known for his uncanny premonitions. The medical attendant of a family with which I am personally acquainted

was dining with some friends at Valparaiso in February of 1906, the captain being at the table. After mentioning his intention of buying some property at Viña he remarked, "Next time we meet I hope it will be in my new home." Cooper looked hard at him and said, "Don't buy any property until after the 16th of August"; but when pressed for an explanation he could only add that he felt sure some great disaster would take place on or about that date. . . .

August 16th was a grey, drizzly sort of day—one of those days which South American people, with their inherent dash of superstition, describe as "inauspicious". And inauspicious it proved in very truth, for at 8 p.m., just when folk were sitting down to their evening meal, without the slightest warning the whole coastal district over a zone of nearly two degrees was convulsed by a frightful seismic paroxysm, followed almost instantly by another of even greater violence, and thereafter by a constant succession of lesser shocks which gradually completed the work of destruction. Large portions of Valparaiso and of Santiago, the Chilean capital, were shaken down by the initial upheavals; Vinodelmar, Quilpue, Limache and a long list of other towns and villages were converted into heaps of rubble in the space of a few minutes. Throughout that entire countryside scenes of terror were enacted such as had not been witnessed for nearly a century, but nowhere was the havoc wrought with quite such abandon of savagery as at Valparaiso.

"The night was calm," we are told by one who was in the doomed city that evening, "and there was absolutely no warning of the coming disaster. The streets were filled with pleasure-seeking crowds afoot or in carriages, the cafés and theatres were thronged. . . . There came a sudden shaking of the earth, not damaging, but sufficiently serious to bring the remainder of the people flocking into the streets. A few seconds later the blow fell heavily. There was a detonation like the bursting of a shell. The earth rose in billows like the sea. Houses toppled into the streets, and the lights were simultaneously extinguished, plunging the city into darkness so dense that it seemed difficult to breathe."

My friend, Mrs. Sidney Ireland, who, when the first shocks came was just sitting down to dinner in the Grand Hotel with her mother and her husband, has given me a thrilling

description of an experience she is never likely to forget : "All of a sudden there was a terrific rumbling, exactly as though an express train were passing under the dining-room. My mother ejaculated the one word '*Terremoto* !' An instant later the plates and glasses and water-bottles leaped into the air and the chairs and tables broke into a mad dance. The last terrifying spectacle I had before the lights went out was that of the great dining-room pitching and rolling exactly like the saloon of a ship in a typhoon, while the little wooden blocks of the parquet floor kept springing out of their setting in response to the violent vertical jolts which alternated with the lateral motion.

"All round us diners were falling to their knees on the heaving floor and praying aloud in the extremity of their terror ; women were screaming and fainting on all sides, and above the rending 'and crackling of the walls and the subterranean rumbling rose the hideous roar of collapsing masonry in the streets outside. The din was something fiendish beyond the grasp of imagination ; it had to be heard to be realised ; it was as though earth and heaven echoed to the very crack of doom. . . .

"Upon the fourth floor were our two baby boys.* My husband somehow or other managed to fight his way up the lurching staircases. He found the children safe, though the iron frame of the bedroom window had sprung from its place and was tilted precariously over the head of one of the babies. A few moments later he was at my side again carrying the children and a bundle of blankets he had snatched up. Then we rushed down the marble steps leading to the street—the dining-room was on the first floor—but had to sit down on them because they were pitching and lurching so crazily that it was impossible to keep our feet. To the best of my belief all the other people in the hotel managed in a similar fashion to reach the open, except one poor little six-year-old boy, who fell through a gap in the stairs. Next day he was found lying crushed to death on the next landing beneath.

"It was raining when we got outside, and everything was sloppy and nasty. The first thing we caught sight of in the

*One of these infants ultimately entered the Royal Air Force. He was that Pilot-Officer Noel Ireland who met his death while flying over Surrey on September 30th, 1931.

street was a huge old-fashioned coach loaded up with flowers, evidently intended for one of the nocturnal funerals which are a common enough feature. After a good deal of argument with the driver about pecuniary compensation—and you need to know South America to grasp the inevitability of that even with the world crashing down in ruins all about us!—we persuaded him to take out the wreaths and crosses and put our children in the coach instead, together with four more little ones whom we found shelterless, and there they remained for the rest of the night.

“In all directions people were rushing panic-stricken out of their houses. One poor woman grovelled in the slush before my husband and flung her arms round his knees, imploring him to fetch her children out of her home. Much as he had done already, he was quite prepared to do as she begged. I said to him, ‘If you go, I go with you,’ and together we went towards the woman’s house. But before we could reach it, it collapsed like a house of cards. . . .

“Presently a policeman came up to my husband and whispered something to him. I demanded to know what it was, and after some hesitation he told me that a tidal wave was expected at any moment. Fortunately we were spared that much, however. . . . All night long we walked up and down, up and down, longing for daybreak. Meanwhile fires had started at both ends of the street. We heard a number of explosions, and afterwards we learned that these were caused when a gunsmith’s shop caught alight and the flames reached the ammunition stored there. . . . At last the morning came, and then my husband sent the children and myself up north in a German ship. The Captain described to me the terrific grinding and creaking noise the houses had made as they swayed backwards and forwards before toppling down ; he said that even from the sea it was so loud that you could scarcely hear yourself speak. While we were waiting to sail people came on board with awful stories of the horrors they had witnessed and the pitiful spectacles of men and women rushing about the streets, demented with anxiety as they searched in vain for missing dear ones.

“My husband stayed on in Valparaiso. Next morning our hotel was leaning over at a sharp angle, but he went into it with our old nurse to help her retrieve her belongings. . . .

We were lucky to be alive, for we had planned to go to the opera on the fatal night, but for some reason my husband had changed his mind. When the first shock came the Opera House fell in on itself instantaneously, and everyone in it was killed. . . . Some friends of ours had to walk all the way in evening shoes from Valparaiso to Viña, where their children were, over hill and dale and on the roughest of roads. . . . One woman of my acquaintance had been attending an evening service at the Church of Espiritu Santo. As the congregation rushed out on feeling the first shock, the church tower came crashing down on top of them and they were smashed out of all recognition. Simultaneously her husband was killed in similar fashion while trying to escape from another building."

There was a rather curious circumstance in connection with the outbreaks of fire. When the failure of the electric light supply plunged the city into pitch darkness, it was immediately assumed by the overwrought populace that the end of the world had come, and their panic was redoubled accordingly. A few minutes later, however, the scene became illumined by the glare of the conflagrations, which, far from adding to the people's terror as one might have expected it to do, had the effect of reassuring them. Whatever havoc the flames might betoken, the wretched onlookers were at least able to see now that their world was still in existence. . . .

It was a sufficiently terrifying world, however, upon which they gazed. As shock succeeded shock, building after building went roaring down in clouds of pungent dust, imprisoning the inmates under mounds of rubble and beating to earth the hysterical crowds that surged through the streets. "The night was appalling," wrote one eyewitness. "The skies were blazing with electricity. Enormous mansions crumbled like children's houses of cards. . . . The scene was lighted by the glare of the fires. Panic-stricken crowds rushed shrieking they knew not whither, while the recurring shocks toppled the walls upon them as they fled. All night long the city was Bedlam. The roads were crowded with refugees fleeing in the direction of Santiago and other towns and villages. The inland highways were blocked with carts and wagons, women and children and their household goods."

To the eyes of the panicking crowd it must have seemed

as though they were hemmed in by a circle of flame. Actually, the conflagration extended northwards from the Plaza Orden, and it was not until long afterwards that it was finally brought to a standstill. Severe though the earthquake shocks were—they were, in point of fact, greater in intensity than those which had destroyed San Francisco the previous April—more damage still was brought about by the fires. "The roar of the flames," we are told, "could be heard far out over the Bay, punctuated at intervals by the renewed rumblings of the earth and the fall of ruins toppled over by the incessant jolting."

The collapse of the gaol, which occurred early on, involved the death of over 100 prisoners. Still more unfortunately, however, as it turned out, it gave liberation to hundreds more—human beasts of prey who speedily added a crowning touch of horror to the catastrophe. Numerous cases were reported of these ghouls cutting off the fingers of living women trapped under fallen masonry in order to possess themselves of their rings. One such unfortunate victim was Señora Montt, the wife of the President-elect, who was flung down from a balcony into the street when her home collapsed. Thieves passing by cut off not merely the poor woman's fingers, but her ears as well, and she was conveyed on board the warship *O'Higgins* in a dying condition. Happily such fiendish atrocities were quickly brought to a stop by the declaration of martial law.

At the cemeteries, too, dreadful sights were witnessed—though of a different nature. One of the biggest cemeteries of Valparaiso was on the crest of a precipitous hill composed, like all the local rocks, of a formation of granite and gneiss which seems to have intensified the force of the shocks. Mrs. Ireland has told me how she afterwards visited this place, where she found all the crosses and other monuments smashed or out of position. The curator described to her what a hair-raising spectacle it had been to see all the grave-stones jumping in their places as though in some wild dance of elation; it had made him think of the Day of Judgment. This, however, was not the worst part by any means. The local custom is to lay the coffins, not in graves dug in the earth, but in niched walls. When the upheaval came these walls collapsed, and multitudes of coffins went hurtling down



VALPARAISO EARTHQUAKE TERROR

"The Opera House fell in on itself instantaneously."

into the heart of the town, bursting open as they struck the ground and spilling their grisly contents piecemeal. In this connection a friend of Errol Tremayne, the well-known artist, had a weird story to tell afterwards. Some years before the earthquake, Tremayne says, this man had been drinking with an acquaintance at a bar within sight of the cemetery on the hill. "One of these days," he remarked, jerking his head in the direction of this golgotha, "I'll be stowed away up yonder. But if ever there's an earthquake, you'll see me come shooting down again p.d.q., I expect !" *And his words came true*, for the recipient of this half-joking prophecy chanced to be at the bottom of the cemetery-hill when the graves gave up their dead, and his friend's coffin disrupted at his very feet, the skull bounding away like a football before his horrified eyes !

On the morning of the 17th it was possible to form some idea of the damage wrought by the great calamity. What with the earthquake and the fire, it was estimated that about 90 per cent. of the buildings in Valparaiso had been totally destroyed, and that more than 3,000 houses which still stood would have to be demolished. In the Almendral quarter practically every building had been razed to the ground, but all quarters built on land reclaimed from the sea had suffered severely. Victoria, Independencia, Carrera, Heras and Rodriguez Streets, right up to the Avenue de los Delicias, had been completely wrecked. The Law Courts, the Maritime Prefecture, the British Consulate and the Bella-vista station had all been wiped out of existence ; likewise the Victoria Theatre, the Naval Club, the Churches of Espiritu Santo and Mercedes, most of the Avenida Brazil and a very large number of important buildings in the Calle Victoria. But the streets which had suffered most severely of all were the Calle de Blanco, Calle de Condell, Calle de la Esmeralda, and those in the Delicias district, where the finest residences were situated. One consoling factor there was, though—the shipping in the harbour was undamaged. That this could be so had at one time seemed too much to hope, for a howling gale had sprung up soon after the initial earthquake shocks, and the thousands of refugees on the encircling hills had all night long watched alternately the destruction of their homes and the raging storm in the Bay,

where fifty ships tugged like maddened living things at their anchors.

For some time after the catastrophe the outside world was left in a state of strained uncertainty as to its actual extent, for the cable communications were all interrupted and the railway-lines broken, so that the only reports it was possible to obtain at first were those brought from Valparaiso by panic-stricken refugees, wildly exaggerated or distorted for the most part. The deaths, it was said, could not total less than 10,000; "The disaster," so ran one of the earliest messages, "is a repetition of the San Francisco horror." It was even seriously stated that the island of Juan Fernandez, the retreat of Alexander Selkirk, Robinson Crusoe's original, which lies some 370 miles west of Valparaiso, had completely vanished. But of all the crazy rumours which sprang up—none knew whence—in those irresponsible days, none was more baseless or more ill-timed than a report—and the police authorities themselves seem to have helped to give it currency!—that a black flag had been hoisted on the American Observatory at Cerro, San Cristobal, accompanied by the sound of a syren, indicating that fresh danger was to be anticipated. This rumour speedily grew into a story that the American Observatory had announced a terrible catastrophe for that coming night, and the crowds of homeless wretches panicked anew.

The hills outside Valparaiso provided a refuge for some 60,000 persons; others went to live temporarily on board the ships in the Bay, and thousands more simply camped out in the ruined streets and squares of the city itself. Splendid work was done for the refugees by various associations and private individuals, pride of place belonging, perhaps, to the Italian Red Cross Society, which rendered aid to 1,340 injured, and to the Manager of the Pacific Steam Navigation Company, who arranged for free housing and feeding of 1,000 people in addition to 1,500 of the company's employees. The condition of the homeless was not enviable; not only were no lights permitted in the city, but the bursting of the water-mains had flooded the streets and, at the same time, made drinking-water very scarce. In addition to these discomforts there was the peril of pestilence, set up by the stench of decaying corpses, and the ever-present danger

arising from gangs of marauders. Almost immediately after the great shock a mob attempted to plunder the premises of Messrs. Rose, Innes & Company, and was only kept at bay by the determined resistance of the staff. Many malefactors were shot by the patrols for crimes such as robbery and violation of the injured, and one man was caught in the act of endeavouring to set fire to a nunnery in which some 200 wounded had found asylum.

No praise is too high for the energy with which the authorities took the situation in hand. They were truly indefatigable in their efforts to restore order, provide for the destitute and the homeless, suppress profiteering, restore efficient sanitation, and make arrangements for the reconstruction of the ruined portions of the city. Within a very few days huge gangs of men were at work clearing away the débris out of the streets and removing the dead and injured from the blackened ruins. Owing to the continual recurrence of shocks, the labourers refused at first to take part in the work of rescue; the military authorities, however, soon compelled them to abandon this attitude. By the 23rd, 1,500 dead had been recovered and buried, but it was certain that there must be many hundreds more yet, and even on the 24th men and women were still being rescued *living* from the wreckage. The dead included 38 out of the 40 employees of the telephone company, and only one telegraph operator was left alive. One very prominent man among those killed was Frederico Varella, the well-known capitalist and politician. No British or Americans lost their lives—probably this was due to the fact that most of them lived on the hills behind the city—but Mr. Rowley, the British Consul, had a leg injured. He was taken from Valparaiso on the s.s. *Orissa*, and arrived at Jamaica *just in time to catch the next earthquake!*

Nor must the credit be given exclusively to the authorities, for the people of Valparaiso themselves, once they had recovered from their first stunned paralysis, adopted a spirit of cheerful resignation which evoked universal admiration, turning their faces steadfastly to the future rather than looking back into the irrevocable past. And slowly but surely the machinery of living began to turn again. Disorders had been sternly repressed with a heavy hand from

the very outset by what troops had been on the spot ; these were heavily reinforced now by the garrisons of Coquimbo and Caldera and naval brigades landed from the warships which had congregated in the Bay, so that the streets were constantly and efficiently patrolled. On the 22nd the conflagrations, which had seemed to be dying out, had suddenly burst out again with renewed vigour, but before long they were extinguished for good and all. Thousands of tons of flour, rice and wheat in the warehouses and afloat had survived the disaster, while ships had hastened north and south to bring in additional provisions, so there was no threat of starvation. By the 19th the tramway-service was again in running order and the gas company had a week's supply of gas on hand, and a day later shelters had been erected by the Government in the Avenida Brazil to accommodate the homeless, while telephone communications with Santiago had been restored. The 22nd saw both telegraphs and telephones in working order and the banks re-opening ; several business houses, too, were open again, and the *Mercurio* newspaper, whose premises by singular good fortune had remained practically undamaged, was coming out with a daily edition. Railway communication between Valparaiso and Santiago was restored by the 25th, though miles of track had been twisted and torn and every tunnel filled up. In short, Chile had made a truly amazing and admirable recovery ; and let it not be forgotten that this work of reconstruction had been carried on under the most trying conditions ; for apart from 82 shocks registered on the first night of the calamity, there had been no less than three hundred shocks since, and it was not until the 24th that the seismic tremors were finally stilled.

The Government gave every possible help to the process of reconstruction, a vote of \$4,000,000 being allocated at once, while the Public Works Department voted \$100,000 to build sheds to shelter the refugees. And abroad, too, energetic measures were being taken to assist the distressed region. Committees were speedily set up in London, Paris and Berlin ; from the Californian Relief Committee appointed to deal with the aftermath of the San Francisco calamity came \$10,000, and the Council of Ministers at Buenos Ayres despatched the cruiser *25 de Mayo* and the transport *Guardia*

Nacional with supplies, \$250,000 having been voted for the purpose by Congress. President Roosevelt issued a special appeal, reminding Americans how the people of Europe, Asia and both Americas had responded to the call for help for San Francisco the previous spring. It is to be noted, however—and not without admiration—that the Chilean Government notified its citizens abroad, who offered to collect subscriptions, that it could not conscientiously authorise them to do so, the nation having adequate resources at its command.

R.38's LAST VOYAGE

R.38's LAST VOYAGE

DURING the latter part of the Great War there was a good deal of scepticism in British official circles with regard to the merits of lighter-than-air craft, and the fact that the War Office in 1917 greatly increased its programme of airship construction was due almost entirely to the tireless representations made by one enthusiast—Air-Commodore E. M. Maitland, C.M.G., D.S.O., A.F.C., as he eventually became.

Maitland was a highly remarkable man, always something of a zealot. He first came before the public eye in 1908 when, in company with C. C. Turner and Gaudron, the famous French aeronaut, he made what was then a record balloon-journey of 1,200 miles from the Crystal Palace in the *Daily Graphic* balloon. Educated at Haileybury and Trinity College, Cambridge, he had served in the South African War, and had thereafter centred his attention without cessation on the problems of military aeronautics. He was the first Army officer to build an aeroplane at his own expense, a machine which may justifiably be regarded as having been the forerunner of the host of aeroplanes possessed by the Army to-day. On the formation of the Royal Flying Corps in 1913, Maitland was appointed Commanding Officer of No. 1 Squadron (Airships). He had a highly distinguished War service, and it was his many daring descents by parachute which earned him the D.S.O. Indeed, his belief in the life-saving efficacy of the parachute—a belief in which he persisted despite widespread doubt—was almost fanatical. He actually made a vow never to land from an airship otherwise than by parachute, provided such an apparatus was available. Demonstrations were of no avail; his argument was that parachutes would never come into general use in the airship service unless an example were set

by constant practical demonstrations that they constituted a safe means of descent.

From 1917 onwards airships continued to advance steadily in official favour, and Maitland remained in the forefront of the movement. He crossed the Atlantic in R.34, and, following that voyage, became officer in charge of the airship base at Howden, in Yorkshire. It was there that in January, 1921, the R.34 met her end. While cruising over the East Yorkshire coast in difficult weather, the airship came into violent collision with some high ground and sustained severe damage to her engines. Though carried 20 miles out to sea, she managed to struggle back in safety to Howden. It was impossible, however, to get her into her shed in the prevailing weather conditions, and next day the wind knocked her to pieces.

Later in the same year Howden became the home of the R.38, the largest rigid airship yet built in any country. Designed by the Admiralty and completed by the Air Ministry, R.38 was constructed at the Royal Aircraft Works, Cardington, Bedfordshire. Her trials were shrouded in the strictest secrecy. The first flight took place on the night of June 23rd, following which it was decided to make certain modifications in the control system. On the night of June 28th a further trial was held, and the results of this caused the authorities to determine upon further alterations. A third flight took place on July 17th. On this occasion a speed of 50 knots was obtained without calling on the full engine power, but it was found that some of the girders amidships had weakened, and reinforcements to these were deemed necessary. It was popularly said that the airship had shown a tendency to "hump" when flying at less than her designed speed, and that it was this that had led to the incipient buckling of the framework. The work of reinforcing was completed by July 30th, however, and no doubt those responsible believed that these alterations had finally removed all possible danger of collapse.

The R.38 had now been disposed of by the Air Ministry to the Government of the United States, which proposed to style her "Z.R.2". The purchase price was to be £500,000, and three-quarters of this sum had already been paid, but before she was finally taken over by her new owners it was

necessary for her trials to be completed. Accordingly, at 7.10 a.m. on Tuesday, August 23rd, the airship left Howden aerodrome to finish the trials, the arrangement being that on completion of them she should proceed to Pulham, in Norfolk, where an American crew was waiting in readiness to take her over.

Elaborate arrangements had been made for the flight to America. Five American warships, one of them a fuel-ship, had been ordered to take up different stations in the Atlantic. In each vessel was a meteorological officer, charged with the task of keeping the airship constantly supplied with weather reports by wireless. Over in America there was growing excitement at the prospect of the flight, which was expected to take 90 hours. An official photographer had for some time been installed at Howden for the purpose of taking pictures to illustrate the sojourn there of the airship and her crew, and orders had come from America for a detailed narrative of the flight itself to be prepared. "If we crash," one of the American members of the crew wrote home to a friend, "it will put airships back ten years."

R.38 carried 51 people when she left Howden for the trial flight, including the following officers of the United States Navy: Commander L. A. H. Maxfield; Lieut.-Commander W. N. Bieg; Lieut.-Commander E. W. Coil; Lieutenant H. W. Heyt; Lieutenant C. G. Little, and Lieutenant M. H. Esterly. The British officers were: Air-Commodore E. M. Maitland, C.M.G., D.S.O., A.F.C.; Flight-Lieutenant A. H. Wann, Captain; Flight-Lieutenant G. M. Thomas, D.F.C.; Flight-Lieutenant I. C. Little; Flight-Lieutenant R. S. Montagu, D.F.C., Navigator; Flying Officer C. H. Wicks; Flying Officer T. H. Mathewson, A.F.C., Engineer Officer; and Flight-Lieutenant J. E. M. Pritchard, O.B.E., A.F.C., Air Ministry representative. There were, moreover, Messrs. Pannell, Bateman and Duffield to represent the National Physical Laboratory, and Mr. C. I. R. Campbell, the Superintendent of the Royal Airship Works. The lastnamed gentleman, who had been the chief designer in charge of R.38's construction, was to accompany her to America. Flight-Lieutenant Wann had been in command of the airship during her earlier trials, and Commander Maxfield was to be in charge of the flight across the Atlantic.

During the War Maxfield had commanded the U.S. Naval Station at Paimbœuf, in France, and had served throughout with distinction. He was an officer of the French Legion of Honour, and had been decorated by the Italian Red Cross for outstanding services rendered at the time of the Messina earthquake.

As already stated, it had originally been intended that R.38 should fly direct from Howden to Pulham, and everybody on board was in high spirits, for the airship behaved so beautifully in all respects that it was confidently believed the constructional difficulties had been overcome once and for all. A flight was made first of all over the North Sea, and the vessel then started down the coast for Pulham. At this juncture, however, a fog developed, and so dense did it become that to land at Pulham was an impossibility. At Tuesday midnight it was decided to head for Flamborough, where there was a direction-finding station. From there the airship drove out over the sea again, and, the fog still being very bad, flew along the coast until Wednesday afternoon, when land was sighted at Hull. She then crossed over to Howden, the intention being to land there, but as it was still early and the landing had been fixed for 6.30 p.m., it was decided to take this opportunity of completing the speed-trial. The ship circled Hull twice, and the trial was carried out without a hitch, after which she pointed once more for Howden.

Throughout the whole period just described R.38 was in constant wireless communication with headquarters. At 8 o'clock on the 23rd, she signalled, "Will remain out to-night to complete necessary trials. Several have been already successfully accomplished. Will land to-morrow." At 1.15 p.m. next day came the message, "Will not land at Pulham until cloud-height increases. Trials proceeding satisfactorily." At 3.30 p.m. the vessel signalled to Howden a request to fly a kite-balloon at 3,000 feet, and to notify the probable winds at that height, as she was about to carry out full-speed trials which were expected to last for about an hour. A further signal received at 4.30 stated that the trials were actually in progress, and half an hour after that came a message, "Landing Howden at 18.30." The last word from the ship was at 5.34—35 hours, that is to say, after her departure from Howden—when she acknowledged receipt of a routine-

signal. Within a minute of the despatch of that message the R.38 had ceased to exist and almost every soul aboard her had been hurled into eternity. . . .

The airship presented a lovely spectacle as she emerged from behind the white clouds above Hull and caught the sunshine. Thousands of people stood in the streets to gaze up at the graceful, silvery shape moving serenely towards the Humber, and the sound of her engines floated down to their ears in a steady drone. And then, with appalling abruptness, came catastrophe—so abruptly, indeed, that the watching multitudes remained at first incredulous that the thing they beheld could really have come to pass.

It was when the airship was over the centre of Hull that she gave her first indication of being in difficulties, for she was then suddenly seen to dip by the stern, as though in an attempt to evade the low-lying clouds. But simultaneously the aft portion seemed to drop away, and within a few seconds she was plunging downward towards the Humber, a shapeless, blazing mass. And as she dropped there came a succession of explosions so terrific that windows were shattered into smithereens at a distance of two miles away. The fore section, which was by far the larger and heavier, descended like a plummet, but the rear portion remained in the air for an appreciable time before floating down in more leisurely fashion. The escape of Hull must be considered little short of miraculous. Had the flaming craft fallen a few moments earlier, the consequences to life and property in one of the most populous parts of the town must have been frightful. One Hull woman, Mariana Barnes, actually died from shock caused by the disaster.

But let an eyewitness take up the tale. "I was in a boat on the river," we are told by Pilot William Henry Smith, "when I saw the airship part in two places. The fore end broke away first, and then, after an interval of fully twenty seconds, the stern end dipped down. At that time the airship was at a height of about 1,000 feet. I saw beds, blankets, and all sorts of things dropping, and some men jumped overboard but fell into the river. The fore part fell into deep water and sank almost immediately, but flames covered the place for some minutes." Among the objects which this witness beheld raining down from the sky would be the R.38's

petrol-tanks ; for it was ascertained afterwards that these became dislodged long before the ship reached the water, and that they fell through the envelope when her framework broke.

The actual spot where the fore portion struck the Humber was some 200 yards from the Victoria Pier, which is the landing-stage used by the boats plying between Hull and Lincolnshire. The other part, comprising the stern, a piece 100 feet or so in length, fell on to what is known as "the little sandbank", a spit lying about 500 yards from the Victoria Pier. Immediately a number of tugs and small river-craft set out at full speed for the wreckage, but there was little enough they could do when they reached it. "I saw the disaster," relates Pilot Osborne, O.B.E., of the Humber Conservancy Board, "and thought there was a chance of saving some of the poor fellows. The launch *Pilot* was started at once for the scene of the wreck, and, assisted by some of the seamen, we attempted to cut open the envelope with jack-knives, but we were unable to find anyone alive. We saw the bodies of two young men in American uniform floating in the river, and though we endeavoured to secure them with boathooks, our attempts were unavailing because of the swell of the tide, which was just coming up. When I first got alongside there were flames on the top of the water, but the envelope was not ablaze."

The explanation of these flames would appear to be that as the burning fabric of the airship fell on the water, it sent forth a jet of blazing petrol, which spread over half a mile in an almost straight line, describable almost as a barrage of flame. This naturally rendered the task of the would-be rescuers difficult in the extreme, but it is doubtful whether in any case any more could have been saved than actually were. The survivors numbered but five—Flight-Lieutenant Wann ; Leading Air-Craftsman E. W. Davies ; Corporal W. P. Potter ; Rigger N. O. Walker, and Mr. Bateman. Lieutenant Little, U.S.N., was taken out of the débris still living, but died before he could be removed. Flight-Lieutenant Wann was brought ashore conscious, but badly cut about the head and bleeding profusely. Davies, though on the verge of collapse, pluckily walked up the sloping landing-stage of Victoria Pier amid cheers from the assembled crowds. It

was from his lips that the first fragmentary account of the accident was received. "I'm too ill to talk," he said, "but I will say we've had a terrible time. It was all over in a moment. The petrol-tanks exploded, and volumes of smoke and fire issued from the ship. Some of the men jumped overboard, but I stuck to the ship and went down with the stern section, which struck on the sandbank, and I was rescued. Some of the poor fellows had no chance whatever, particularly those in the control car."

It speedily became apparent, from the stories told by the survivors, that the framework of the airship had crumpled during a series of severe rudder-tests to which she was being subjected after the speed-trial was over. "I was in the aft cabin," narrated one man, "and was busy taking photographs, for we had a splendid view of Hull, and I little imagined disaster was at hand. It was only when I felt the ship crumple and plunge down by the head that I realised that all was over. I found myself clinging to some of the débris in the water, and was rescued by a tug just as the flames were spreading to the part of the framework to which I was clinging." Another of the first survivors' accounts to be put on record was the following: "The airship was flying over the North Sea this morning, and was in perfect flying condition until about 5.35 p.m. At that time the controls were being tested at high speed, and it is to this I attribute the firing of the petrol-tanks. After a few sharp explosions there were two very loud ones, and the ship began to fall. I fell with the stern part, and was luckily picked up, dazed but not severely hurt. I fell into some wires, and was able by shouting to attract the attention of some men in a boat, who took me to the pier."

Mr. Harry Bateman, of Halifax, was in the R.38 on behalf of the National Physical Laboratory for the special purpose of taking scientific measurements, which it was hoped might prove a useful guide to designers of future aircraft, especially in regard to the fins. According to his narrative, the ship had just completed her full-speed test, during which she had touched 60 knots, the speed aimed at. After travelling at this pace for a quarter of an hour, the speed had been reduced to something between 45 and 50 knots, and it was then that the R.38 had been overtaken by calamity.

Bateman, it appeared, was in the tail of the ship at the time, taking photographs to illustrate the pressure exerted on the fins. While thus occupied, he was informed by Major Pritchard that the controls were about to be moved with some rapidity—a final, severe test to determine the airworthiness of the ship for such an ordeal as the passage of the Atlantic. Up to this point there had been universal delight at the behaviour of the craft and the efficiency of her controls.

The accident, Bateman said, came then with appalling suddenness. His impression was that the ship was shaken three or four times in a lateral direction and a few times in a longitudinal direction. A moment later came the explosions, and the occupants realised then that the craft was doomed. The tail fell down, Bateman finding himself flung into the cockpit. His parachute was ready; he attached himself to it and jumped overboard. As luck would have it, however, the rope got entangled in some gear, with the result that Bateman was left hanging suspended over the side of the ship, and in that precarious situation he fell with the tail as far as the surface of the Humber. By God's mercy that portion of the structure, unlike the heavier fore part, fell on to the water fairly gently.

As for Messrs. Walker and Potter, the former was in the fin at the moment of the calamity, and jumped overboard just before the ship fell, alighting on a sandbank in mid-stream. Potter, who was working with Bateman, rushed forward to get his parachute. Finding it impossible to reach this, however, he remained in the cockpit. He actually descended sitting on the edge of it, and did not even get wet!

Potter's inability to get to his parachute was in all probability an experience shared by almost the entire personnel, for, though there was a parachute available for every man on board, the swiftness of the disaster rendered them as good as useless. Indeed, only two parachutes were seen to fall clear of the ship.

Here is Flight-Lieutenant Wann's story of his personal experience of the catastrophe: "I was in sole control of the vessel when the disaster happened. I was in the fore car, and we had just passed over Hull when there was a violent crack. I felt the fore car falling. Then it rose at a high angle, and I pulled over the water ballast to level keel. Then there



R.38's LAST VOYAGE

'Plunging downward towards the Humber, a shapeless, blazing mass.'

"We could not use the parachute, as we were too low, being only a few hundred feet up. I saw we were going to land in the water, and so we climbed up on the fabric forward of the tail cup. When I thought we were going to strike I jumped. I was surprised to feel my feet strike bottom, and I was in four feet of water near the shore. Both of my companions stuck to the ship and clung to her when she struck. I managed to scramble aboard the wreckage, and we three were soon picked up by a tug."

The news that R.38 and the vast majority of her brave personnel were no more was received everywhere with consternation. At Pulham it came as a stunning shock both to those officers, including Major Scott, who had been in charge of R.34 in its cross-Atlantic flight, and to the American detachment who had been so eagerly awaiting R.38's arrival. In the United States, too, the dreadful tidings created positive dismay. The Secretary of the Navy, Mr. Denby, could scarcely credit that the thing had really happened, and his feelings were shared by the American people at large. Not only were the United States officers on board familiar figures in the public eye, but Air-Commodore Maitland, Flight-Lieutenant Pritchard and the other British officers who had flown to America in R.34 had made hosts of friends during their brief stay there. That prophecy made by one of the American members of the crew, already mentioned, that "if we crash, it will put airships back ten years", found wide endorsement now in all parts of the United States. A circumstance which made the tragedy additionally poignant was that two officers and eight petty officers of the American crew had married since their arrival in England, while one of these, Chief Machinist Mate Charles Broome, had become a father only two weeks before the catastrophe.

As stated earlier in the narrative, three-quarters of the £500,000 purchase-price of R.38 had already been paid over by the United States Government. The ship having apparently not yet been transferred to the American crew, it was very naturally assumed in the States that at least some part of the sum paid would be refunded. Nor was this expectation disappointed, for within a very few days it was officially announced that the two governments had agreed to share the loss equally.

The disaster of course gave rise to an immense newspaper discussion, and a number of American papers joined in condemning lighter-than-air craft altogether. On the other hand, there were other journals which maintained that the idea of the dirigible was one too essentially sound to be abandoned, but that further development could only be dependent upon the production of an inexpensive non-inflammable gas. It was pointed out by experts that the use of any gas of an inflammable nature constituted a standing peril to the new giant airships then under construction, and they went so far as to state that if the R.38 had reached America helium would have been exclusively used for the future. Helium, it should be added, is a non-inflammable gas, the second lightest known to science and possessing almost the same lifting power as hydrogen, and one, moreover, which refuses to be absorbed, and therefore cannot form an explosive mixture through diffusion in the air. Large factories for its manufacture had since the War been constructed in Texas and Oklahoma, where it was obtainable at comparatively small cost from the natural gases.

From the newspaper-correspondence on both sides of the Atlantic emerged here and there—as it always does emerge following any fatality sustained in the cause of scientific endeavour—the view that valuable lives had been sacrificed in vain. But there were saner judgments, too, to counteract these voices, and it is perhaps worth while here to quote what *The Times* had to say in its leader upon the calamity :

The fate of R.38 may seem to be a terrible blow to human progress in air transport. But the memory of the men who gave their lives in her should compel sound judgment to see her loss in the right perspective. As human daring pursues its conquest of the air, losses among the pioneers are inevitable. They know it themselves, and think little of the risk, in the faith that on their sacrifice will be based the triumph of ultimate victory. R.38 was experimental. The experiment has ended in disaster to her and to her human complement. From such disaster—momentarily seeming irreparable—all human enterprises have risen more fully equipped for success. It will be so with the airship. To doubt it would be treachery to the brave men who have died in that faith. The defects that have destroyed R.38 will be known and avoided the sooner for this tragedy. Of the fate of such men as perished with her the fibre of human discovery is compact. Sorrow for their loss—overpowering in the freshness of the blow that it has dealt, in America and here—must not destroy our

belief in the value of that which, even in their death, they have achieved.

On the evening following the disaster, the tide being up, no signs of the wreck were visible, though an Admiralty representative reported the two portions to be lying in eight feet of water. At low water, however, a large part of the fore section became visible, lying completely doubled up on its sandbank. It was not until the tide rose again that the tugs were able to approach near to it. But during the morning of the 25th considerable quantities of wreckage were washed ashore, including Commander Maxfield's greatcoat, some partially burnt fragments of the ship's envelope, and a bundle of scorched papers which turned out to be R.38's policy and some official documents relating to the vessel.

Salvage operations were begun that same morning, and on the day following they were brought to success, the wreckage being hauled to the surface by an 80-ton floating crane. That which so recently had been a lovely creation full of grace now presented a heartrending spectacle—merely an inextricable mass of buckled girders, ropes and fire-blackened envelope-material. And with the tangled débris came up the mortal remains of two of the Americans, so fearfully burned and mutilated that only their discs enabled them to be identified. The body of Flight-Sergeant Martin was found encircled by the rope of a parachute, and hanging by its feet to the framework of the airship, the unfortunate man having evidently become entangled in the bracing-wire. Engineer Loftin was discovered close to one of the telegraph indicators. His rigid fingers still gripped a telephone receiver, mute witness to the fact that he had gone to his end at the post of duty. It was not until the 29th that poor Maitland's body came to light. It was found in the control car, and his hand was on the control cord.

As late as the first week in September there were six bodies still undiscovered, but by this time all of the American dead, at all events, had been recovered, the last corpse found being that of Machinist's Mate William Julius. The Americans' bodies were embalmed at the mortuary of the Hull Royal Infirmary and placed in oaken caskets, each accompanied by the flag of the United States, and on September

7th H.M.S. *Dauntless* sailed from Plymouth bearing them to their native land for interment. Here is the touching letter written to the Lord Mayor of Hull by Lieutenant-Commander R. E. Byrd, U.S.N., as he then was :

We will carry over to America with us as the one pleasant recollection of our common tragedy, the thought of the wonderful sympathy and hospitality we have received from the people in and about Hull. It seems to me that our shared sorrow, the aftermath of which we have shouldered together, has brought us to a closer understanding of one another, and I am sure that history will never change the gratitude that my country will feel towards Hull for its part in this sad occurrence.

A public memorial service was held in Holy Trinity Church, Hull, another at St. Paul's Church, Bedford, and a third at the Church of St. Mary Magdalene, Pulham, this last attended by thousands. Yet another memorial service—one on the national scale—took place on September 7th at Westminster Abbey, and in the course of this was used a quaintly tender sixteenth century prayer which will form a fitting conclusion to the narration of this great tragedy of man's effort to conquer the air : "O Lord, support us all the day long of this troubelous life, until the shades lengthen, and the evening comes, and the buisy world is hushed, the fever of life is over, and our work done. Then, Lord, in Thy mercy, grant us safe lodgeing, a holy rest, and peace at the last, through Jesus Christ our Lord."

THE END

